EXAMINING THE RELATIONSHIP BETWEEN PERSONAL CHARACTERISTICS AND EFFECTIVE PRACTICES OF MIDDLE LEVEL TEACHERS

A Dissertation
Presented to
the School of Education
Drake University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by Kristen R. Crabtree-Groff
July 2003

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An abstract of a Dissertation by
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July 2003
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A preliminary study was undertaken in January 2003 to investigate the personal characteristics of effective middle level teachers along with the relationship of those characteristics and the implementation of middle level core practices. A random sample of 298 Iowa middle level teachers in grades five through nine yielded survey data from five scales: ability to implement middle level core practices, importance of implementing middle level core practices, satisfaction with the implementation of core practices, agency, and personal characteristics. Statistical and predictive significance was found in the independent-dependent variable relationship between persona characteristics and the ability to implement middle level core practices. Recommendations for educators based on survey findings have been included.

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Chapter 1

INTRODUCTION

The historical roots of educating early adolescents are grounded in the obligation to meet the developmental needs of these learners. Teachers who work with early adolescent students recognize the uniqueness of the age group, as individuals and especially, as students. Early adolescent students are in the midst of change: biological, cognitive, socio-emotional, as well as educational. As they progress developmentally from childhood to adulthood, young adolescent students must also negotiate passage from elementary school to high school. Historically, that transition has occurred in a junior high school setting, a mini-high school originally designed to bridge the elementary years and the high school years. Though the junior high school has a long history of educating early adolescents, "as a downward extension of the high school, the junior high failed to serve middle level learners appropriately" (David, 1998, p. ix). At this point in time, the junior high school movement has not fulfilled its mission of creating educational experiences uniquely suited to meet the needs of early adolescent students.

The middle years, ages 10 to15, encompass the developmental stage of early adolescence. "This time of vast emotional, social, and cognitive change has been called pubescence, transescence, emergent adolescence, early adolescence, and young adolescence" (Knowles & Brown, 2000, p. 2). During the middle level years, young adolescents experience the onset of puberty ushering in dramatic, transformational changes "more rapid than during any other developmental stage except that of infancy" (Jackson & Davis, 2000, p. 7). During early adolescence, "(t)here is virtually no aspect

of a child's physical, biological, social, emotional, and intellectual development that is not subject to change. As change occurs in one area, it affects change in the others" (Caissy, 1994, p. 2). The developmental stage of early adolescence is like no other stage, and each early adolescent is like no other early adolescent. Educating young adolescents requires unique approaches to teaching and learning in an effort to meet their developmental needs.

Core Practices of Educating Young Adolescents

In the last three decades, there has been a shift toward more developmentally appropriate educational structures for young adolescents. The seminal documents, *Turning Points: Preparing American Youth for the 21st Century* (1989) and *This We Believe* (1982), have developed a framework for the restructuring of early adolescent education based on the physical, intellectual, socio-emotional, and moral development of the age group. With grassroots vision and determination, practitioners both at the middle and university level have advanced a focus on middle grades reform through ongoing collaboration and research -- the middle school movement.

At its fundamental base, the middle school movement seeks to integrate educational research regarding best practices in teaching and learning with the physical, cognitive, and socio-emotional needs of early adolescents. The needs of early adolescents form the principles of planning and preparing, "programs, policies, and practices" to positively impact and nurture student developmental growth (National Middle School Association, 2001, p. 1).

Fundamental components of developmentally responsive middle level schools are threefold: 1) to provide developmentally appropriate learning opportunities through interdisciplinary and integrated curricula, student advisory programs, varied instructional strategies, and exploratory programs; 2) to ease the transition from elementary to high school; and 3) to produce citizens able to actively participate in a democratic society.

Gallagher-Polite (2001) added insight to the fundamental components of developmentally responsive middle level schools. By combining the work of many middle level researchers, Gallagher-Polite (2001) has synthesized the literature regarding effective middle level practices.

1. A shared commitment to a *needs-responsive philosophy* that drives program and practice.
2. Various *organizational structures* that promote the flexible use of time, space, and resources.
3. Various *collaborative supports* that organize students, school personnel, parents, and community members on teams, councils, and partnerships.
4. An *integrated curriculum* that makes connections within and between core (language arts, reading, math, science, social studies) and encore (fine arts, applied arts, health, physical education) subjects.
5. A broad-based *exploratory program* that provides encore courses, mini-courses, and co-curricular programs.
6. An emphasis on *student advocacy* that addresses the affective needs of young adolescents.

7. Use of *effective classroom practices* that engage and involve young adolescent learners.
8. Authentic and varied *assessments* that monitor student and school progress. (p. 46)

Paul S. George (1999) credits the middle school movement as "the most successful grassroots movement in American educational history" (as cited in Jackson & Davis, 2000, p. 1). Currently, though many educational institutions house students in grades five to nine, a gap exists between the knowledge of developmentally appropriate, research-based practices and practices that are actually being implemented in middle level schools.

There are more than 12,000 middle level schools across the country, meaning a majority of young adolescents attend school in this type of setting. McEwin, Dickinson, and Jenkins (1996) have acknowledged "the popularity of grades 6-8 middle schools has continued to increase in recent years" (p. 133). The original junior high school movement and the current middle school movement have instituted a vision to provide developmentally responsive educational programming to early adolescents. In less than a hundred years, from the establishment of the first junior high school, a majority of transescent students now attend a school separated from elementary and high school students.

However, over the last century though the buildings have been built, core practices originally designed to meet the educational needs of middle level students have not been sufficiently maintained. "Slightly more than half of middle schools seem to be

using practices that are exactly what experts say is needed for excellence" (Scales, 1996, p. 9). McEwin et al. (1996) have determined that only 60 percent of middle schools use an interdisciplinary curriculum, one of the basic tenets of middle school philosophy. The researchers also found "the largest block of faculties with specialized middle school preparation was less than 25%, a figure which remained constant from a 1988 to1993" (p. 148). Still, the expectations of parents and communities, as well as middle level educators themselves, are to provide an appropriate education for young adolescent students. Mizell (1999) in a presentation to a middle level audience asks critical questions concerning educators who work with early adolescents.

> Is it too much to expect that these educators should like and understand the age group for which they are responsible? Is it too much to expect that middle grades school teachers and administrators should be knowledgeable about the most effective ways to engage students in learning? Is it too much to expect that they should be steeped in the content they are teaching and be confident that they can help young adolescents learn this content at increasingly more difficult levels? (p. 4)

When it comes to educating early adolescents, the expectation for middle level schools and educators is simply put -- teachers should have knowledge of developmentally appropriate practices and should provide developmentally appropriate learning opportunities in developmentally appropriate environments to effectively educate middle level students.

Knowledge, Skills, and Dispositions of Effective Middle Level Teachers

What are the factors involved in providing an effective education for middle level students? One factor is the knowledge base of educators working with middle grades students, which is linked to teachers' ability to use core middle level practices in their classrooms. Another factor is the support teachers receive encouraging them to choose and stay at the middle level. The last factor is the personal characteristics of the effective middle level teacher. All three factors contribute to the distinctive effectiveness of a middle grades teacher. All three factors are related to the roles a middle level teacher plays, the characteristics of effective middle level teachers, and the professional choices (agency) of middle level teachers.

The knowledge, skills, and dispositions of effective middle level teachers are grounded in those of effective teachers at all levels. Over the years, the knowledge base of effective teaching has changed. "(N)ew licensing standards and preparation initiatives demonstrate, a reflective, student-centered, problem-solving orientation is increasingly understood as a fundamental part of professional life for all teachers" (Darling-Hammond & Sclan, 1996, p. 94). This fundamental part of professional life is expected of teachers from all grade levels. However, what reflective, student-centered, problem-solving orientation looks like at the middle level may differ from other grade levels.

Middle level teachers, because of middle school concept, also operate differently than teachers of other grade levels. *This We Believe...And Now We Must Act* (2001) describes a "teacher's duality of commitment (significant academic learning and

developmentally appropriate contexts) to early adolescents" -- the roles committed middle level teachers play in the education of early adolescents.

> Middle school teachers committed to the students they teach perform at least five specific roles: (a) student advocate, (b) role model, (c) supporter of diversity, (d) collaborator, and (e) lifelong learner. As well, the duality of commitment has implications for the professional preparation of middle school teachers and for their continuing professional development focusing on refining and extending their knowledge, dispositions, and skills to perform these and related roles successfully. (Erb, 2001, p. 12)

Teachers in schools functioning under a middle school philosophy work in collaborative teams with colleagues, community members, parents/guardians, and students. The eight core practices require middle level teachers to work differently than their elementary and high school counterparts in several areas including curriculum development (integrated, inquiry-based learning), monitoring student achievement (authentic assessment), and reporting student progress (portfolios and student-led conferences). Beane and Brodhagen (2001) highlight five common expectations of middle level teachers from the two founding middle school documents, *Turning Points: Preparing American Youth for the 21st Century* (1989) and *This We Believe...Developmentally Responsive Middle Level Schools* (1995).

1. Teachers should have a thorough understanding of the young adolescents with whom they work.
2. Teachers should participate in collegial teaming relationships.

3. Teachers should act as affective mentors for young adolescents.
4. Teachers should use varied teaching and learning activities.
5. Teachers should use curriculum approaches beyond the traditional separate subject approach. (2001, p. 1159)

Because of their unique roles and expectations, the knowledge, skills, and dispositions of effective middle level teachers are different from other educators.

Influencing the expectations and roles of middle level teachers is the context of a middle level school. "Teaching cannot be separated from the social and institutional context within which it takes place" (Beane & Brodhagen, 2001, p. 1157). "Teaching is fundamentally a social relationship, characterized by mutual dependency, social interaction, and social engagement. Individualizing the social basis of teaching dissolves the social context, establishing instead the supposed autonomy and very real isolation of the teacher in the current school structure" (Britzman, 1986, p. 453). Middle level schools are social institutions based on the socio-emotional and academic needs of students, and middle level teachers shift in and out of multiple relationships, negotiating their roles as advocate, teacher, facilitator, and learner. Responsive middle level schools recognize the social nature of learning, and effective middle level teaching requires a collaborative approach to teaching and learning for both early adolescent students and their teachers.

In a developmentally responsive middle level school, teachers work in interdisciplinary teams, and facilitate student involvement in curriculum development, incorporate multiple resources, and match the interests and issues to student perspectives. Middle level teachers do not plan, teach, or work in isolation; instead, a shared

responsibility and accountability focuses the cross-discipline learning of teachers and students on a team. This shared vision is different from typical elementary teacher who may feel a responsibility for cross-discipline learning of her students but not for staff; a typical high school teacher who may feel a sense of duty toward his students for a particular subject area but not toward another teacher or another subject area. Effective middle level teachers bring knowledge of the developmental needs of early adolescent students, knowledge of curriculum design that enhances natural connections between disciplines, and knowledge of creating classroom structures that foster the social nature of learning – knowledge beyond subject expertise or classroom management. Effective middle level teachers' knowledge is essential to designing and implementing effective middle level education.

Effective middle level education relies on the knowledge, skills, and dispositions of teachers. "Since the work of the organization (the education of youth) is too complex and uncertain to be left to professionals operating in isolation from each other, teams of teachers are required to work together to carry out the main function of the school" (Erb, 1997, p. 34). Lipka and Brinthaupt (1999) recognize "that demonstrating effectiveness and mastery in teaching requires a unique blend of professional, interpersonal, and intrapersonal skills" (p. 226). Effective middle level teachers demonstrate a high level of those skills as part of their dispositions. Because of the unique developmental characteristics of early adolescents, effective middle level teachers, by the nature of their work, exhibit unique personal characteristics that are measurable and observable. Identification and study of effective middle level teachers' personal characteristics can

provide validation and support for training, recruitment, and retention of effective middle level teachers.

Repeated efforts by researchers to discriminate between effective teachers and less effective teachers are recognized by Borich (1999). "Few personality traits have been found that generalize across classrooms and grades other than those that characterize the teacher as a nice, helpful, socially acceptable individual who is appreciated by most people everywhere" (p. 92). Effective teaching goes beyond being nice. Effective teaching addresses a set of skills and dispositions that affect how a teacher plans and implements instruction to best meet the needs of students. "What may be needed to better discriminate more effective from less effective teachers is the identification of specific and distinctive dimensions of personality that can inform our definitions of effective teaching" (Borich, 1999, p. 92). Borich (1999) establishes a theoretical framework for future exploration of the affective side of teacher effectiveness, those dimensions of personality that can be identified and nurtured through teacher development programs.

Borich applies Mead's (1934) self-theories to effective teaching -- the notion that the self is formed through "internalizing and organizing psychological experiences" (1999, p. 93). Through professional experiences and relationships with students, supervisors, and colleagues, a teacher develops an image of self through five dimensions: 1) sense of bodily self, 2) sense of self-identity, 3) sense of self-extension or the performing self, 4) sense of self-esteem, and 5) sense of self-image. As teachers seek to influence students' personal and cognitive growth through classroom activities, so reciprocally, do students influence their teachers' growth. "Teachers with positive self-

concerns, whose concerns for pupils are greater than their concerns for self, can be expected to function within the teaching role as effective significant or salient others and to use the classroom environment to foster positive self-concepts in their pupils" (p. 106). An effective teacher should have a strong sense of self in order to foster the self development of students. Since early adolescents are in the midst of identity development, their teachers' sense of self and ability to support the growth of students' self is essential. Do effective middle level teachers have a strong sense of self that differs from other teachers?

The literature-to-date describing middle level teachers has only alluded to the unique personalities (dispositions) of middle level teachers. Arth, Lounsbury, McEwin, and Swaim (1995) begin the introduction of their study of 83 middle level teachers with the statement, "Middle level teachers are special. Those who observe them day after day presiding over their volatile, active charges know they have a distinctive quality that sets them apart from elementary and high school teachers" (p. 1). The seminal documents, *Turning Points, 2000: Educating Adolescents in the 21st Century* and *This We Believe...And Now We Must Act* (2001), which examine, define, and communicate the tenets of middle school philosophy call for specialized teacher preparation in order to effectively reform middle grades education. Though the documents acknowledge the need for training and experience in developmentally appropriate learning experiences for middle grades students, they also insinuate a need for a certain personal characteristics due to the nature of recommended core practices.

In addition to technical skills necessary to become an effective middle school teacher, there is a personal component, a notion of self, permeating descriptions of effective middle school teachers. Knowles and Brown (2000) have written an advice book for prospective middle level teachers. The authors request that readers look through the list of "personal and professional characteristics" and ask themselves whether they "have the characteristics necessary to be an effective middle school teacher" (pp. 5-6).

- A sense of humor that you share with students regularly
- Flexibility that you demonstrate in your instructional and curricular planning and delivery
- The ability to actively listen to your students
- The ability to show unconditional caring for young adolescent students
- A contagious passion for learning
- A willingness to move beyond the boundaries of your subject area training
- A philosophy and action plan that places students at the center of the learning process
- A belief in the process of collaborating with students regarding instruction and curriculum
- The confidence to guide students on their path to learning
- An awareness of adolescent health issues, and a willingness to address these issues with students
- A strong sense of your own identity
- A wealth of knowledge about young adolescent development

- A belief in all students' ability to succeed
- Knowledge and skills to help all students achieve success. (Knowles and Brown, 2000, pp. 5-6)

Knowledge, skills, and dispositions of effective middle level teachers can be taught and can be reinforced through their pre-service and in-service preparation. Though content knowledge, skills in curriculum development, theory, and pedagogy are essential, training of middle level teachers must include a personal awareness component. Teachers need training and practice in self-awareness. An effective middle level preparation program encompasses knowledge-building in the core practices of middle school concept, a theoretical foundation with application; as well as, builds a capacity for the social attributes associated with effective middle level teaching. The capacity-building of interpersonal and intrapersonal skills centers on identified personal characteristics, their validation and support. Identification, validation, and support in developing the self may directly influence teachers' decisions to choose a middle level teaching positions, thus, maintaining a supply of specially qualified teachers.

Carter and Doyle (1996) have discovered from personal narratives and career cycles of novice and experienced teachers that teaching is deeply personal. The authors quote Kagan (1992), "(T)he practice of classroom teaching remains forever rooted in personality and experience" (as cited in Carter & Doyle, 1996, p. 163). Personal characteristics affect the cognitive acquisition of knowledge, the connection with colleagues and students, and the implementation of teaching and learning practices.

Sparks and Lipka (1992) have observed the importance of including the development of and practice with teachers' personal characteristics.

> Teacher personality characteristics, those personal qualities a teacher brings to the classroom, must be variables of record in our plans to improve classroom instruction. It is impossible to separate the person from the professional. Just as we can educate people to expand their cognitive abilities, we can educate people to expand their affectivity, to become aware of who they are in relation to self and to others. (p. 310)

In teacher preparation programs, the predictive role of personal characteristics can accompany development of knowledge and skills in working with early adolescents within a middle level setting. Research has linked positive effects of the middle school movement on student achievement and professional development, has determined components of effective teacher preparation programs, but the role personal characteristics play in predicting effective middle level teachers has yet to be examined.

A Call for Research

Research in teaching and teacher education have focused on cognition and cognitive development, a change from a past focus on behaviorism. Richardson (1996) calls "for research that examines both beliefs and actions and perhaps further develops the concept of praxis within teaching and teacher education, "looking for a relationship between beliefs and actions" (p. 114). Examining the ability of middle level teachers to implement core practices of effective middle level education, the level of importance

teachers place on core practices, and their satisfaction with the outcomes of implementing those practices will begin addressing this issue.

Ducharme and Ducharme (1996) recommend future research to study "psychological traits for teacher education applicants" which can predict success in teaching.

> There is much in the literature on teacher education about the importance of the 'best and brightest,' the best informed, the most socially committed, and the most whatever else that particular writer may think appropriate for teachers. Literature and scholarship exist in a variety of fields to suggest that the psychological makeup of individuals may have a great effect on present and future performance. (p. 1034)

A measure that illustrates the relationship between personal characteristics and level of implementation of the core practices can clarify whether or not certain personal characteristics can predict the implementation of core practices. Creating a survey instrument that includes variables of personal characteristics, level of implementation, and teacher agency responds to the recommendation for further research by Sparks and Lipka (1992) to combine personal characteristics and "effective instruction behaviors of master teachers" (p. 310).

It has been said you are what you teach. Is that true of middle school teachers? What are the personal characteristics, the internal essence of effective middle level teachers? Are there identifiable, distinctive personal characteristics unique to these professionals? Do personal characteristics predispose teachers toward middle school

philosophy that, in turn, can predict the effective implementation and satisfaction of middle school philosophy?

A history of research has determined the effectiveness of middle level core practices in creating developmentally responsive educational programming to meet the needs of young adolescents. This preliminary study seeks to examine factors that are attributed to effective middle level teachers by examining a set of personal characteristics that predict implementation of middle level core practices.

Purpose of the Study

This preliminary study seeks to determine if a correlation exists between a teacher's self-reported personal characteristics and the level of implementation of core practices of effective middle school philosophy. The core practices of middle school philosophy provide curricular learning promoting the physical, cognitive, and socio-emotional growth of early adolescents. Determination of the predictability of personal characteristics with regard to implementation of effective middle school practices is the basis of this preliminary study. Teachers who match the theoretical typology of an effective middle level teacher are best suited to work with early adolescents. The physical, cognitive, and socio-emotional changes of early adolescence demand developmentally responsive schools employing middle level teachers who have the personal characteristics that embody and effectively implement the middle school philosophy.

Research Questions

1. What are the factors that influence the number of core effective teaching practices implemented by middle level teachers?
2. What role do personal characteristics play in predicting effective implementation of middle level core practices?

Null Hypotheses and Research Hypotheses

Hypothesis of Significant Differences in Group Means

Null Hypothesis

There is no difference between group means on respondents' ability to perform core practices (dependent scale).

Research Hypotheses

1. There is a significant difference between group means on respondents' ability to perform core practices (dependent scale) on the basis of gender.
2. There is a significant difference between group means on respondents' ability to perform core practices (dependent scale) on the basis of the setting of their school.
3. There is a significant difference between group means on respondents' ability to perform core practices (dependent scale) on the basis of age.
4. There is a significant difference between group means on respondents' ability to perform core practices (dependent scale) on the basis of years in the teaching profession.

5. There is a significant difference between group means on respondents' ability to perform core practices (dependent scale) on the basis of years teaching at the middle level.
6. There is a significant difference between group means on respondents' ability to perform core practices (dependent scale) on the basis of years at current position.
7. There is a significant difference between group means on respondents' ability to perform core practices (dependent scale) on the basis of the respondents' level of match on the personal characteristics scale.

Survey Instrument and Key Measures

The survey instrument comprises five scales and individual demographic measurers totaling some 131 items including:

- a series of individual level measures (i.e., gender, age, years teaching, years teaching at the middle level, years teaching at current position, and the type of school they teach at) designed to measure respondents' key demographic social characteristics;
- 29 items designed to measure respondents' perception of the importance of middle level core practices (i.e., early adolescent development, middle grades curriculum, middle grades instruction, middle grades school organization, families and community relations, and middle grades teaching roles);
- 29 items designed to measure respondents' ability to perform core practices -- dependent scale (i.e., early adolescent development, middle grades curriculum, middle grades instruction, middle grades school organization, families and community relations, and middle grades teaching roles);
- 29 items designed to measure respondents' satisfaction that each middle level core practice positively impacts students (i.e., early adolescent development, middle grades curriculum, middle grades instruction, middle grades school organization, families and community relations, and middle grades teaching roles);
- a 10 item scale for agency; and

- 25 (semantic differentials) adjective pair items that are indicators of dispositions representative of effective middle level teachers.

Reliability and Validity Assessment of Key Measures

One crucial ingredient in being able to show reliability and validity within a data set would be the presumption of a normal distribution across respondents. While there is evidence of a somewhat normal distribution between cases in this study, it is obvious that an N of 52 is too small for higher ordered statistical applications and tests. For the purposes of this study coefficient alpha and standardized item alpha measures are accepted as evidence of sufficient reliability until a larger scale study can be conducted.

Assumptions

1. It is assumed all of the teachers in the study are honest and candid with responses to survey items.
2. It is assumed all of the teachers in the study are currently teaching at the middle level.
3. It is assumed that there is a normal distribution of measures from obtained responses.
4. It is assumed survey respondents have a clear understanding of effective middle level core practices.

Limitations

1. Teachers may report their opinions and perceptions on the survey instrument. It is possible the teachers' perceptions are influenced by experiences in their middle level schools or in an ideal middle level school rather than the perceptions they hold of themselves.

2. Teachers may report perceptions of ideal middle level teachers or their colleagues rather than themselves.
3. Teachers in the study come from different schools with different expectations and organizational structures for educating early adolescents so their teaching experiences may differ.
4. Teachers in Iowa are licensed to teach middle level students through a variety of endorsement options and configurations.
5. Teachers who teach middle level students may not have a consistent knowledge of effective middle level teaching practices.
6. There is no control group with which to compare survey responses.
7. The sample includes middle level teachers in Iowa, which limits the generalizability of findings to other middle level teacher populations.
8. The sample is drawn from middle level teachers and does not include responses from principals, central office personnel, or teachers from other grade levels.
9. The survey instrument comes from valid literature regarding effective teaching practices in general as well as for early adolescents. Although the concepts and contexts have been tested and validated, the instrument itself and the items have not been validated or tested in conjunction with each other.
10. Personal characteristics (semantic differentials) have been created. Existing and tested instruments in their entirety have not been chosen for this study due to the lengthiness of those survey instruments, the specialized scoring required for the instruments, and the cost-prohibitive nature of such instruments for this type of study.

11. The survey instrument contains five scales, which have not been linked together in previous research studies. Each of the scales has face and content validity, but construct validity has not been established with regard to the connection and predictability of results. Scales for importance of effective middle level practices, ability to implement effective middle level practices, and satisfaction with the positive impact of implementation on student outcomes have been adapted from McEwin, Dickinson, Erb, and Scales (1995). The literature regarding effective middle level teachers has been used to create other items.

Definitions

Adolescence. Children, typically ages 10 to 18, experience the developmental stage of puberty (Woolfolk, 1995, p. 98). At this time, they will achieve physical and sexual maturity and become less dependent on peer acceptance.

Agency. A teacher's feelings of autonomy in influenced by the notion of agency: "(t) he relationship between individuals and the social systems in which they participate" (Johnson, 1995, p. 4). The social system can cause feelings of restraint with regard to instructional practices or can create a supportive environment for innovation.

Core Practices of Effective Middle Level Education. These practices include the following characteristics:

- A shared commitment to a *needs-responsive philosophy* that drives program and practice.

- Various *organizational structures* that promote the flexible use of time, space, and resources.
- Various *collaborative supports* that organize students, school personnel, parents, and community members on teams, councils, and partnerships.
- An *integrated curriculum* that makes connections within and between core (language arts, reading, math, science, social studies) and encore (fine arts, applied arts, health, physical education) subjects.
- A broad-based *exploratory program* that provides encore courses, mini-courses, and co-curricular programs.
- An emphasis on *student advocacy* that addresses the affective needs of young adolescents.
- Use of *effective classroom practices* that engage and involve young adolescent learners.
- Authentic and varied *assessments* that monitor student and school progress.

(Gallagher-Polite, 2001, p. 46)

Implementation of all core practices denotes the highest level of effective middle level programming for early adolescent education.

Developmentally Appropriate Practices. The adaptation of instruction and assessment is required to match the physical, cognitive, and socio-emotional abilities and meet the needs of all students.

Developmentally Responsive Programs. The developmental needs of all students can be met through the implementation of developmentally appropriate teaching and learning methods into educational programming.

Early Adolescence. Also termed young adolescence, preadolescence, and transescence, early adolescence is the developmental stage, ages 10-15, marking the onset of puberty. Due to the extreme rush of hormones from the endocrine and pituitary glands, this age is subject to growth spurts, emotional highs and lows, and an intense awareness of physical appearance. Acceptance by peers is an overwhelmingly influential factor on behavior.

Junior High School. Established in 1909, junior high schools have been created to bridge the transition between elementary school and high school to meet the developmental needs of early adolescent students. Junior high schools may house students in grades five through nine. Junior high schools tend to be mini-high schools in terms of climate, organization, delivery of subject matter, and co-curricular opportunities. Junior high schools may or may not be implementing developmentally responsive programming according to the core practices of effective middle level education.

Middle Level. Also known as middle grades, the educational period between elementary school and high school constitutes the middle level. Middle level teachers work with early adolescents and may have teaching positions in junior high schools or middle schools.

Middle Level Typology. The adjectives most reflective of personal characteristics of effective middle level teachers. The following adjectives have been used in this study: abstract thinker, curious, risk-taking, unconventional, tender-minded, affectionate, self-

assured, experimenting, excitable, relaxed, optimistic, independent, humorous, flexible, spontaneous, sociable, distractible, industrious, democratic, mischievous, forgiving, impulsive, trusting, idealistic, and immature.

Middle School. Through the mid-part of this century, junior high schools have not maintained the founders' intent of creating developmentally responsive schools. In the 1960's, the term middle school has refocused attention to developmentally responsive educational programming that differs from current junior high school programs. Junior high schools may house students in grades five through nine. Middle schools may or may not be implementing developmentally responsive programming according to core practices of effective middle level education.

Middle School Concept. The tenets of middle school concept (also called middle school philosophy) have been established by two seminal documents, *Turning Points: Preparing American Youth for the 21st Century* (1989) and *This We Believe...Developmentally Responsive Middle Level Schools* (1995). The term middle school does not mean that developmentally appropriate practices are not found in a junior high school setting. Middle school concept is reflected in the core practices of effective middle level teaching.

Research-Based Practices. Educators are making instructional decisions based on research-based findings. Scientifically-based research "involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs" (Olson & Viadero, 2002, p. 1) Research-based activities include:

1. a systematic, empirical methodology that draws on observation or experimentation
2. rigorous data analyses
3. reliable and valid measurements and/or observations
4. experimental or quasi-experimental designs with appropriate controls (a preference toward designs incorporating within-condition or across-condition)
5. possibility of replication or opportunity to systematically build on findings
6. acceptance in a peer-reviewed journal or panel of experts. (Olson & Viadero, 2002, p. 1)

For the basis of this paper, both applied and basic research will be included.

Teaching Standards. Teaching Standards are defined as what an effective teacher should know, be like, and be able to do -- the knowledge, skills, and dispositions. The National Board for Professional Teaching Standards has become a model for state level teaching standards.

Outline of Procedures

A preliminary study of middle level teachers was undertaken in the winter of 2003, to predict the connection between personal characteristics, agency (personal choice), and the ability to implement core practices of middle school philosophy.

- A pilot study to determine the reliability and validity of the survey instrument has been conducted in May of 2002 to a convenient sample of 25 middle school teachers.

The sample has come from schools in which the researcher has had direct contact. This school is implementing components of middle school philosophy.

- A mailing list of all practicing middle level teachers in grades 5 through 9 across the state of Iowa has been obtained from the Iowa Department of Education. A random sample of 298 teachers has been collected. Each teacher received the survey instrument in January of 2003.
- A survey instrument with five summated scales (importance, ability, and satisfaction with implementation of core practices, agency, and personal characteristics) has been developed to create a theoretical measure of middle level teachers in Iowa (independent variable).
- Quantitative data analysis included: crosstabulation, t-tests, one-way ANOVA, Stepwise Linear Regression, and for reliability testing, scale co-efficient alpha and standardized item coefficients.
- Open-ended questions added further analysis of participants' responses on the five scales and provide an opportunity for participants to clarify responses.

Chapter 2

REVIEW OF THE LITERATURE

A discussion of the literature would be necessary to justify the purpose of this preliminary study. The importance of personal characteristics, including the identification of them and their relationship to effective teaching has only been suggested in the literature. From Dewey (1900, 1902, 1916) to Dickinson (2001), researchers and authors have discussed the importance of certain personal characteristics for middle level educators to work effectively with students, but the identification of personal characteristics and the connection to implementation of core practices has yet to be done. This preliminary study has interfaced historical and current writings on developmental characteristics of early adolescence and their implications for educators, creating and implementing developmentally appropriate instructional practices along with the level of implementation, the competencies of effective teachers, personal characteristics, specialized preparation of middle level teachers nationally and in Iowa, and a vision for teacher preparation. The groundwork for this preliminary study is represented in each of these sub-topics.

Developmental Characteristics of Early Adolescence

The creation of developmentally appropriate educational structures for early adolescents requires a thorough understanding of characteristics associated with the developmental stage of adolescence. G. Stanley Hall (1908), one of the original psychologists to focus on the adolescent, defined the age as "a new birth" where students

experience changes in physical, cognitive, and socio-emotional development (Hall, 1908, p. ix). Early adolescence has been defined as a complex period where early adolescents undergo tremendous physical, cognitive, and socio-emotional changes as they transition from childhood to adulthood. Caissy (1994) has written a comprehensive book for parents and educators of early adolescents. By collating the research on adolescent development and best practices in teaching early adolescents, Caissy has provided a thorough analysis of the developmental characteristics of early adolescence made direct connections to parenting and teaching techniques. "Early adolescence is a unique and significant period in human development. It marks the end of an individual's childhood years and the beginning of youth or young adulthood. It is a time of great transition" (Caissy, 1994, p. 1). Knowles and Brown (2000) described early adolescence as a unique stage of life characterized by rapid and individualized development.

> Growth at this time is inconsistent from one individual to the next. Developmental stages are uneven and follow no set timeline. Middle school students can be physically mature young women, or girls who have not yet experienced their first menses; they might be fully-grown young men, or boys barely five feet tall. Their social and emotional actions can range from childlike behaviors to adult perceptions. (p. 4)

Knowing, recognizing, and understanding, the developmental characteristics of pre-adolescence should be considered when creating optimum learning environments for middle level learners.

Physical Development

Pre-adolescence is marked by the onset of puberty, the complex developmental process where children become young adults in a period of two to four years. The onset of puberty, the developmental rate, and the sequential process of development are considered to be as individual as each child's fingerprint; therefore, chronological age would be a poor predictor of puberty, the initiation and duration. For girls in Western cultures, the beginning of menstruation usually has occurred by twelve years of age, after the peak growth spurt. For boys, the beginning stage of puberty has been characterized by testicular enlargement between nine to thirteen years of age with a peak growth spurt around the age of thirteen. Although the developmental characteristics of puberty have been documented, the onset and duration of puberty could vary dramatically from child to child. "Two girls (or boys) who are exactly the same chronological age may be in different stages of development. There can be differences of six to eight inches in height and 40 to 60 pounds in weight between them" (Caissy, 1994, p. 10).

In general, girls and boys begin puberty between the ages of ten to fourteen, with some girls beginning as early as nine or some boys as late as seventeen (Caissy, 1994, p. 10). Unlike the systematic and gradual nature of childhood growth, transescence is distinguished by periodic outbursts from different parts of the body at different times. "Differences in the rate of growth of body parts are so varied and great during early adolescence that almost every part of the body is affected, even the lens of the eye" (Caissy, 1994, p. 19). The physical development of young adolescents is just one

component of maturation into adulthood. Young adolescents also undergo changes in cognitive, emotional, and social development.

Cognitive Development

Directly linked to physical development of young adolescents is their cognitive development. As children progress through transescence, their thinking abilities also mature; they are able to see a wider perspective, beyond black and white. Inhelder and Piaget (1958) through long-term studies have named and described four stages of cognitive development in children: The Sensorimotor Period (birth to age 2), The Preoperational Period (2 to 7 years), The Concrete Operational Period (7 to 11 years), and The Formal Operational Period (11 years through adulthood). At the time of transescence, pre-adolescent students are caught between two developmental stages (Concrete Operational and Formal Operational). Maturation rate from The Preoperational Period to the Concrete Operational Period to the Formal Operational Period transpires in a matter of a few years, the majority of cognitive developmental time spent in the later two Operational Periods where thinking processes evolved from concrete thinking to more formal, abstract thinking. Erratically capable of integrated, logical thought and able to solve problems through multiple means, early adolescents transition from child-like cognitive capabilities to those of adulthood. Although some early adolescents show adult-like cognitive abilities -- systematically applying strategies to solve complex problems -- those abilities might not be consistently demonstrated.

Cognitive development can be described as a reciprocal process. As early adolescents learn to recognize multiple perspectives, their world-view would widen. They

shift from a here and now perspective to a more global, futuristic perspective seeing a connection between themselves and their world. During this time of transition, young adolescents fluctuates between child-like, egocentric thinking to creative, adult-like, imaginative thinking. An idealistic outlook is characteristic of this developmental stage as young adolescents develop a mature connection between what they think might happen and what realistically might happen. Caissy (1994) has described the "vulnerability" to idealism for early adolescents as:

> anything imaginable to early adolescents seems possible. Being in the early stages of adult thinking, most early adolescents have not yet developed beyond this level to determine whether their ideas are realistic or workable in reality. When thinking of possibilities, they dwell on perfection. This is why early adolescents so often offer ideal solutions to complex problems, and idealistic alternatives and endings to various life situations. (Caissy, 1994, p. 106)

At concurrent times, transescents learn to see their world in a new way, through new thinking capabilities. They are eager to understand and explore their world, hoping to find new solutions to complex global issues.

The diversity in pre-adolescent development can be observed in a middle grades classroom. On any given day, some young adolescent students demonstrate growth from Concrete Operational to Formal Operational, some students demonstrate only Concrete Operational skills, and some other students consistently demonstrate Formal Operational skills. The varying physical developmental growth patterns coupled with varying cognitive developmental growth patterns would require a multifaceted and differentiated

approach in planning appropriate educational experiences. To be effective, middle level teachers have to acknowledge the disparate cognitive capabilities within each classroom make-up, as well as create and facilitate meaningful learning experiences for every student every day.

Socio-Emotional Development

Early adolescence can be characterized as a time of social experimentation and self-discovery, where pre-adolescents search to find a personal place in an increasingly complex adult world. "Within the trials and tribulations of early adolescence are the opportunities to forge one's own identity, to learn new social roles, and to develop a personal code of ethics to guide one's own behavior" (Jackson & Davis, 2000, p. 7). In the early 1900's, G. Stanley Hall, known as the father of adolescence, defined and described this developmental stage as a time of storm and stress where young adolescents would take on an egocentric focus. Current thought, although eliminating the notion of storm and stress, has still acknowledged the socio-emotional impact of the onset of puberty. Becoming more aware of personal biological changes, early adolescents become increasingly preoccupied with themselves and their own needs.

The preoccupation with self is associated with a perception that the whole world is watching. To the middle school student, every clumsy step caused by growth spurts and every blemish caused by hormonal secretions, is scrutinized by a public audience. "Because they feel they are constantly being observed or talked about by others, early adolescents prepare for school or a social event as if they were preparing for this 'imaginary' audience" (Caissy, 1994, p. 71). The egocentric fear of being watched is

coupled with the need to distance oneself from family and finding approval from peers. Taking on the identity of a peer group, early adolescents have chosen a safe place for experimentation and exploration. "Early adolescents often adopt a personality they feel will attract friends rather than being and acting like themselves. Thus, their personalities can change from one instance to another, becoming very chameleon-like" (Caissy, 1994, p. 77).

At times, two distinct personalities are assumed: one for home and one for peers; the peer personality could become the dominant one as early adolescents establish an independent self, the natural progression from childhood to adulthood. In a quest to appear more independent and more grown up, transescents might try on several identities. Scales (1996) in a report based on Search Institute's framework of developmental assets has characterized early adolescence as a time of self-exploration.

> During early adolescence, young people need to find out what activities they like and what they are good at doing. Exploration is their developmental work, much as playing is the developmental work of infants and young children....Because this is a time when young adolescents are trying on for size different attitudes and values no less than different styles of dress and varied activities, they may appear to be especially argumentative with adults, disagreeing with adult values on various political, religious, or social issues. Real differences of opinion might exist, of course, but often, young adolescents argue a position to understand themselves better more than to convince adults of the validity of that position. (p. 21)

Young adolescents have been known to test boundaries to establish an independent self by confronting, questioning, and disagreeing with adults. However, young adolescents have not yet reached cognitive or socio-emotional maturity and lack the ability to explain and to justify actions and arguments. Through adult eyes, disagreements are seen as rebellion, questions as defiance, but early adolescents might lack the cognitive and emotional wisdom to express their thoughts and concerns tactfully. In addition, they might be unable to predict potential consequences for their words and actions. With cognitive maturation does come the ability to see beyond black and white, and with abstract thought and complex problem solving skills, young adolescents as they mature, can learn to inquire, to express, and to achieve independence without alienating important adults in their lives.

To pre-adolescents, adulthood is seen as the ultimate goal since an adult has gained total independence, yet their cognitive developmental stage has given them an idealistic and unrealistic view of adulthood. Being an adult would mean having the freedom to do as one pleases, having money, setting rules, feeling invincible. They do not recognize the rules, restrictions, and responsibilities associated with adulthood. A dichotomy between real and ideal can be seen in Caissy's (1994) portrayal of young adolescents' need to emulate adults.

> Early adolescents idealize adults. As a result, they want to be like adults and want to do adult things (for example, wear makeup, smoke, swear, drink, and have sex). In the process, early adolescents try to dissociate themselves with childhood and anything that is related or reminiscent of childhood. By emulating adult

> behavior, early adolescents feel more adult-like. However, they lack not only the experience and vision to see the responsibilities that go with adult behavior, but also the consequences that can result from adult behavior. (p. 68)

Multiple studies have shown harmful consequences of young adolescents trying on what they perceive as adult behavior. Unable to cognitively and socially negotiate the repercussions associated with unsafe forms of experimentation, some young adolescents have experienced negative side effects. Current findings on young adolescents have shown participation in potentially risky behaviors.

- In 1998, 52.5 percent of eighth graders reported having drunk alcohol, and 46 percent reported having smoked cigarettes (Substance Abuse Mental Health Services Administration, 1999a).
- Between 1991 and 1998, the percentage of eighth-grade students who had tried any kind of illicit drug, including inhalants, increased from 29 percent to 38 percent (Substance Abuse Mental Health Services Administration, 1999a).
- The use of marijuana by eighth graders rose 11% from 1991-1996 (Substance Abuse Mental Health Services Administration, 1999a).
- The United States has demonstrated the highest teen birth rate of developed countries -- more than double that of Great Britain, six times higher than Scandinavian countries, and fifteen times higher than Japan (National Center for Health Statistics, 2000).

- Overall arrest rates form violent crimes committed by ten to seventeen-year-olds increased from1983 to 1993/1994. In 1994, 82% of homicide by youth was committed with firearms. (Surgeon General, 1999)
- Through December 2000, 4,061 cases of AIDS in young people from the ages of thirteen to nineteen were reported to the Centers for Disease Control. Eighteen percent of all AIDS reported cases are in the 20-29 age group. Since the onset of AIDS averages ten years, the majority of those cases were infected during early adolescence or adolescence. (National Institute of Allergy and Infectious Diseases, 2001)
- One in ten young people might manifest signs of an anxiety disorder (Substance Abuse Mental Health Services Administration, 2001)
- More teenagers and young adults have died from suicide than from combined death rates of cancer, heart disease, AIDS, stroke, birth defects, pneumonia and the flu, and chronic lung disease. Between 1952 and 1995, the incidence of suicide among adolescence and young adults nearly tripled. (Substance Abuse Mental Health Services Administration, 1999b)

The statistics regarding young adolescents and their risky behaviors should cause alarm. Early adolescents, while transitioning through the complex developmental changes of puberty, have experimented and explored their world, but that world has also become more complex. Access to unsafe situations, a faster-paced lifestyle, and the instability of family structures among other factors have added more pressure to early adolescence. The increase in anxiety, suicide, violence, and other risky behaviors have been linked to

indicators of external stressors in early adolescent worlds. As they try to grow up, middle school students have experimented with what they perceive as adult behaviors in dangerous ways not just to appear grown up but also to escape. Although some risk taking might be normal and not harmful, some risk taking could have life-altering consequences.

Levitt, Selman, and Richmond (1991) theorized stress and boredom along with a biological predisposition to sensation seeking are central to risky experimentation (in Scales, 1996, p. 21). Maggs, Almeida, and Galambos (1995) described early adolescents' desire for fun has had more influence on their decision-making than a fear of negative consequences (in Scales, 1996, p. 21). Both of these studies illustrated the cognitive and socio-emotional immaturity of early adolescents. Pre-adolescents have possessed a natural desire for independence and experimentation. They might find opportunities for exploration within safe environments if those environments are made available. Without caring and supportive school, community, and home environments, the inability to predict potentially serious consequences of behaviors have placed early adolescents at the mercy of potentially dangerous situations without capability to handling those situations.

A successful search for identity would require testing new identities and social roles within the safe confines of supportive adults in home, school, and community. Scales, (1996) has suggested three psychosocial questions regarding the young adolescent's search for self: Am I competent? Am I normal? Am I loveable and loving? (p. 20). Answers to these questions might differ from day to day, from pre-adolescent to pre-adolescent, from context to context. The challenge for adults would be the continual

guidance and nurturance of all young adolescents to affirmative answers for each of those questions. Effective middle school teachers have accepted that challenge by providing appropriate educational settings and experiences for pre-adolescents.

Implications for Educators

The developmental characteristics of early adolescence were at the heart of two educational movements to provide appropriate educational experiences for middle level students. The knowledge base on early adolescent development guided educators and researchers as they sought to meet the needs of middle level students. Hall (1908) expressed an enthusiastic bias for the age group.

> As for years, an almost passionate lover of childhood and a teacher of youth, the adolescent stage of life has long seemed to me one of the most fascinating of all themes, more worthy, perhaps, than anything else in the world of reverence, most inviting study, and in most crying need of a service we do not yet understand how to render aright. (p. xviii)

Hall's passion for early adolescent development launched a new focus on what was considered the most appropriate educational delivery system for young adolescent students.

Eichhorn (1967), a founder of the middle school movement, outlined a vision of effective middle level education.

> The middle school concept, founded in the dramatic developments in human growth and development as well as in the society in which youngsters interact,

> may emerge into a successful organizational pattern, but only if educators develop programs commensurate with the characteristics of the 10 to 13 year old in all respects. (p. 51)

Keeping the developmental needs of students in mind, the middle school movement promoted the organization of educational experiences with the developmental needs of the pre-adolescent as the centerpiece. The developmental needs, the interests, the impact of society on the individual, the ability of an individual to create social change were inherent qualities of an effective middle level education.

Eichhorn (1972) touted the development of democratic citizens as the main purpose of education. "First, the emerging adolescent school should contribute to the development of values" (p. 54). The author advocated that the essential role of school was developing values consistent with societal expectations. To Eichhorn, creating citizens involved an appropriate middle level instructional program that included individual attention, performance-based standards, the learning of skills and processes rather than the acquisition of content, and the social or interaction of skills and processes. Another component of the middle level school would incorporate personal development. The need for students to interact with peers and adults allowed for "guidance programs which enable students to study, analyze, question, and discuss their personal growth and development with regard to relationships with family, friends, and adults" (p. 59).

An appropriate middle level educational program would focus attention on curriculum development, instructional learning strategies, and the grouping of content knowledge into an integrated whole. Every decision would be grounded in the

developmental needs and interests of the learners. In an address at the national ASCD Conference, Eichhorn (1977) recommended "'a different model for middle school education: the model of developmental age" as opposed to a chronological age-based model where students are housed and educated according to their sameness (p. 75). The developmental age model would place emphasis on the differences of early adolescent students. This model formed the essence of effective, developmentally appropriate instructional practices for educating early adolescents.

Developmentally Appropriate Instructional Practices for Early Adolescents

Recognizing the complexity of early adolescent development would be only one step in creating developmentally appropriate learning experiences. Another step includes an application of knowledge in early adolescent development in creating those learning experiences. Meeting the physical, cognitive, and socio-emotional needs of early adolescents would require acknowledgement that early adolescents do not develop at the same rate. Before delving into a description of developmentally appropriate practices, two overarching constructs should be recognized: the onset of puberty should not be used as determination of cognitive development, and "any subject can be taught effectively in some intellectually honest form to any child at any stage of development" (Bruner, 1960, p. 33). First, the onset of puberty would not "be considered the distinctive feature of adolescence" and (Inhelder & Piaget, 1958, p. 335). The onset of puberty -- the physical development of a child -- must be considered in conjunction with the cognitive and socio-

emotional development. Educators should not assume the physical maturation of early adolescents would equate with cognitive and socio-emotional development.

> (T)he maturation of the nervous system can do no more than determine the totality of possibilities and impossibilities at a given stage. A particular social environment remains indispensable for the realization of these possibilities. It follows that their realization can be accelerated or retarded as a function of cultural and educational conditions. (Inhelder & Piaget, 1958, p. 337)

It would be up to the middle grades school staff to design and implement appropriate practices to meet the developmental needs of young adolescent students.

Designing and implementing appropriate middle level practices are grounded in the work of well-known educational theorists who focused on meeting the varying developmental needs of learners. Vygotsky (1978) believed the teaching of a child, providing the learning experiences, should be based on the appropriate developmental stage of the child rather than the chronological age. From longitudinal studies and on-going observations of children, Vygotsky coined the term the zone of proximal development. Vygotsky defined the zone of proximal development as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). During early adolescence, students would experience physical, socio-emotional, and cognitive changes that vary from individual to individual. Developmentally appropriate middle level

programming would allow students to experience learning activities and organizational structures based on each pre-adolescent's zone of proximal development.

> The zone of proximal development furnishes psychologists and educators with a tool through which the internal course of development can be understood. By using this method we can take account of not only the cycles and maturation processes that have already been completed but also those processes that are currently in a state of formation, that are just beginning to mature and develop. Thus, the zone of proximal development permits us to delineate the child's immediate future and his dynamic developmental state, allowing not only for what already has been achieved developmentally but also for what is in the course of maturing. (Vygotsky, 1978, p. 87)

In their study of childhood cognitive development, Inhelder and Piaget (1958) found an inherent connection between early adolescents' (termed adolescent) cognitive growth and social structures that influence that growth. To Inhelder and Piaget, educational experiences should allow for and promote the development of cognitive abilities within appropriate social structures.

> The adolescent is an individual who is still growing, but one who begins to think of the future -- i.e., of his present or future work in society. Thus, to his current activities he adds a life program for later "adult" activities. Further, in most cases in our societies, the adolescent is the individual who in attempting to plan his present or future work in adult society also has the idea (from his point of view, it

> is directly related to his plans) of changing this society, whether in some limited area or completely. (1958, p. 339)

Developing appropriate experiences for pre-adolescents should be centered in the zone of proximal development; thus, the classroom structure as well as the learning opportunities should address the individual development and growth of each student. Taking developmental literature into account, the focus of effective middle level education would be the middle level students, their physical, cognitive, and socio-emotional needs.

Educators should recognize the impact of how students learn and apply that knowledge in developing appropriate instructional activities for students. The zone of proximal development should be considered a critical component in making educationally appropriate decisions for early adolescents. The zone of proximal development cannot be determined by chronological age. A 14-year-old might show signs of Formal Operational thinking in one moment with one problem, and revert back to Concrete Operational thinking in the next moment with another problem. Determining students' ability to handle Formal Operational thinking would require teacher knowledge of pre-adolescent learner readiness.

Recognizing the importance of developmental age versus chronological age, Bruner (1960) established the notion of learner readiness to address increasingly complex issues and problems. Citing Inhelder and Piaget's work (1958), Bruner advocated a spiraling of curricular concepts -- "the great issues, principles, and values that a society deems worthy of continual concern for its members" (p. 52). Instruction in these big concepts should begin early with modification based on the abilities and interests of the

students. Those concepts would continuously be revisited as children age, increasing the learner's knowledge base and increasing the intellectual capacity of the learner. "Experience has shown that it is worth the effort to provide the growing child with problems that tempt him into next stages of development" (p. 39). The chronological age of the leaner should not influence the development of learning activities, rather the readiness of the learner to engage in increasingly complex problems and tasks should be the determining factor. The critical connection between developmental needs of learners -- their readiness for learning, and the designing of appropriate instructional practices would be at the center of a developmentally responsive educational program

One of the most influential personalities in education, Dewey (1902), also made the essential connection between developmental needs and appropriate instructional practices. Advocating for a curriculum based on personal experience, active learning, and a connection to a student's integrated nature of thinking and learning, Dewey opposed a fragmented subject-driven educational program. Education should be child-centered, "(t) he child is the starting-point, the center, and the end. It alone furnishes the standard. " (p. 9). Recommending a revolution in educational thought and practice, Dewey (1902) proposed a developmentally responsive approach to education, the best way to educate democratic citizens.

> Abandon the notion of subject-matter as something fixed and ready-made in itself, outside the child's experience; cease thinking of the child's experience as also something hard and fast; see it as something fluent, embryonic, vital; and we realize that the child and the curriculum are simply two limits which define a

> single process. Just as two points define a straight line, so the present standpoint of the child and the facts and truths of studies define instruction. It is continuous reconstruction, moving from the child's present experience out into that represented by the organized bodies of truth that we call studies. (p. 11)

Dewey (1916) believed in educational reform based on methodological innovations in the classroom. Instructional practices must include focusing on a child's experiences and needs; using scientific inquiry, taking field trips and excursions; relating instruction to social, political, and economic issues; and creating collaborative learning situations that encouraged social interaction. To Dewey, education's purpose was to reform the social ills of society by producing active citizens ready to participate in democratic society. "(T)he educative process is a continuous process of growth, having as its aim at every stage an added capacity of growth....education is a process of preparation or getting ready. What is to be prepared for is, of course, the responsibilities and privileges of adult life" (p. 63). Facilitating student inquiry and problem solving through collaborative learning communities would give students opportunities to gain experience in preparation for adulthood and active citizenship.

Posing complex problems and providing opportunities to practice adult roles as educational experiences, would give early adolescents the opportunity to develop socially, emotionally, and cognitively. Using this approach to educational practice, middle level teachers could take advantage of the early adolescents' need to change society and to solve complex problems when designing learning activities. Through developmentally appropriate learning experiences, early adolescents' successful transition

from Concrete Operational thinking to Formal Operational thinking through relevant social issue investigation could be enforced.

Beane (1993) incorporated Dewey's philosophy of education (1900, 1902, 1916), Inhelder and Piaget's (1958) work on cognitive development, and Bruner's (1960) notion of readiness when writing *A Middle School Curriculum: From Rhetoric to Reality*. This book laid the groundwork for implementing developmentally appropriate practices. Beane (1993) created a set of guidelines to facilitate the writing of an appropriate middle level curriculum, "the central and crucial factor in the life of a school" (p. 1).

1. The middle school curriculum should focus on general education.
2. The central purpose of the middle school curriculum should be helping early adolescents explore self and social meanings at this time in their lives.
3. The middle school curriculum should respect the dignity of early adolescents.
4. The middle school curriculum should be firmly grounded in democracy.
5. The middle school curriculum should honor diversity.
6. The middle school curriculum should be of great personal and social significance.
7. The middle school curriculum should be lifelike and lively.
8. The middle school curriculum should enhance knowledge and skills for all young people. (pp. 17-21)

Beane (1993) advocated an integrated approach to curriculum delivery, rather than a fragmented subject-centered approach. Students' interests should be central to curriculum

development -- organized around social problems and issues. Curriculum development would be accomplished collaboratively between teachers and students.

In a collaborative, integrated educational setting, students could learn core skills and concepts while making real-life connections between their world and themselves. They would experience democracy firsthand. Beane's (1993) proposal encircled the physical, cognitive, and socio-emotional development of early adolescent students and provided a plan for taking the middle school movement beyond meeting basic needs to actually implementing a challenging, motivating, research-based educational program. Until Beane, research regarding the education of early adolescents concentrated on their developmental needs. With this seminal work, Beane (1993) established the foundation of developmentally responsive educational curriculum for middle level students based on decades of educational research.

Taking into account the developmental needs of early adolescents and the foundation for a developmentally responsive educational program, early adolescent educators and researchers created a unique organizational school structure. This new school would house early adolescents, would provide an experienced-based learning environment taught by teachers who understood the developmental characteristics of the age group. This new school would incorporate adolescents' needs, interests, and talents when developing curriculum. Students would solve real-world social problems that had personal significance. This new school would model democratic citizenship. This new school was called the junior high school.

The Junior High School

The founders of the junior high school movement "articulated a philosophy born out of the awareness that the middle level learner is a unique individual with special needs that calls for a distinctive educational program" (David, 1998, p. ix). Beginning in the 1920's, educators called for educational programming that would meet the special needs of pre-adolescents. The first intermediate school designed to house students from grades seven and eight was built in 1895 in Richmond, Indiana, but the true initiation of the junior high school movement occurred in 1909-1910 in Columbus, Ohio and Berkeley, California. The junior high school movement accompanied a hope to deal with many concerns of the American education system.

The early junior high school offered a more systematic approach to teaching subject matter to students -- providing earlier opportunities for students to take college preparatory courses, removing repetition and duplication of learning, and restructuring the departmentalized organization of disciplines. Also, the junior high school provided a transitory step between elementary and high school, phased in elective exploratory courses, reduced the number of failures and drop-outs, and increased learning through a more developmentally responsive education. During the 1920's and 30's the number of junior high schools increased from 100 to 1,842. At this time, junior high schools and the education of young adolescents began to appear in educational literature.

Unfortunately, the initial motives for creating unique learning environments for young adolescents were lost as junior high schools fluctuated between looking more like elementary schools and looking more like high schools. Lounsbury (1960), one of the

founders of the junior high school movement praised the fact that by the 1960's, junior high schools were the norm for educating pre-adolescent students. However, Lounsbury admitted the movement had not yet reached fruition. Young adolescents, although housed in the junior high schools, were not necessarily receiving an educational program based on the founding precepts of the junior high school movement. Lounsbury explained several reasons why "junior hasn't really grown up" (1960, p. 106).

First, the word junior denoted a sense of inadequacy, a notion of being less than the high school. Obtaining a teaching position in a junior high school held less prestige than a placement in high school. Second, junior high schools tended to be housed in less adequate buildings -- students were shifted to the old high school after a new one was built or to an old elementary which did not provide the facilities for exploratory courses and was too small for the developing young adolescent bodies. Third, there was "an absence of adequate standards, regulations, and policies for the junior high school level (Lounsbury, 1960, p. 107). Without the prestige of the high school, there were few governmental policies and support systems set up to help junior high schools. For example, Carnegie units became the norm and were implemented at the high school level disregarding the preceding two or three years of schooling.

Without legislative support, institutions of higher education did not provide adequate support, which led to inadequate knowledge and expertise in creating and maintaining a middle level vision at the community, school district, and building levels. Teachers and administrators did not have specialized preparation to work with young

adolescent students. Lounsbury (1960) called middle level preparation the "blind spot" in teacher education.

Insufficient institutional and governmental support coupled with insufficient knowledge handicapped the junior high school movement toward its goal of creating a developmentally responsive education for young adolescents. In the 1960's a renewed focus on this age group prompted educators to find another solution to meeting the need of young adolescent students. Left out of the mainstream conversation, the junior high school movement had to reinvent itself.

The Middle School

Ironically, the founders of the middle school movement were also the founders of the junior high school movement. It was the intended goal of William Alexander, Donald Eichhorn, John Lounsbury, Conrad Toepfer, and Gordon Vars to create a developmentally responsive educational experience for early adolescent students. The middle school movement was launched with the words of Alexander in 1963. Alexander choose the term middle school to redefine and refocus the intent of the junior high school movement.

> I would vote for elimination of the separateness of current elementary, junior and senior high schools, with the resulting need for bridges, and for instead a 12- to 14-year institution, with three levels in its vertical structure, each of which has a program and organization appropriate to its place in a sequential educational pattern. Thus, there would be a lower, middle, and upper level, or a primary, middle, and high school. (Alexander, 1963, pp. 4-5)

Alexander continued in his remarks outlining characteristics of a middle school, many of which stemmed from the original junior high movement. He acknowledged that junior high schools, even in their current form, were meeting the needs of young adolescents better than K-8 elementary schools or high schools. Alexander (1963) coined the name middle school to give a new name to an old idea that had been mishandled and had lost its purpose and meaning. The new middle school would allow for students' "freedom of movement, appropriate health and physical education, more chances to participate in planning and managing their own activities, more resources for help on their problems of growing up, and more opportunities to explore new interests and to develop new aspirations" (Alexander, 1963, p. 5). Other characteristics were exploratory programs beyond the six- or eight-week elective and a continuation of a general education curriculum emphasizing intellectual growth.

> My own view is that the junior high school break has unwittingly hastened the disrespect for intellectual activity too common among adolescents. Has the 'junior' high school, with its imitation of the high school activity and social programs, hastened and fixed more firmly the ideals of athletic prowess (boys) and popularity (girls) over academic brilliance as reported in Coleman's study of *The Adolescent Society*? (Alexander, 1963, p. 6)

To continue, Alexander promoted middle schools pay special attention to the individual needs of students not through ability grouping and pull-out programs but through "adequate diagnostic and guidance services" and granting opportunities for teachers to work individually with students and their families (Alexander, 1963, p. 7). Alexander

also solicited "a flexible curriculum, permitting and indeed aiding pupils to progress at different rates and to different depths" (p. 7).

Junior high schools were intended to function as a transitional bridge between elementary school and high school, meeting the developmental needs of early adolescents and creating citizens. However, over time, junior high schools became mini-high schools. There was a return to departmentalization of subject matter, an adoption of high school scheduling, and an addition of extra-curricular programs that modeled high school programs. On the contrary, in the middle school, curriculum would be taught through flexible organizational structures in the classroom and the school, utilizing differentiation of instruction, and encouraging an inquiry-based approach to learning. Alexander (1963) called for organized teams (homeroom groups) of teachers and students along with health and physical education along with special instruction and lab experiences taught by content-specialists who could develop and implement general education and exploratory learning experiences uniquely suited for young adolescents.

A Response to Criticisms of the Middle School Movement

There have been efforts to criticize the middle school movement and the middle school philosophy. These critiques have blamed middle schools for decreasing student achievement through the watering down of rigorous curriculum and focusing too much on developing positive student self-esteem. Mizell (1999) to a conference audience of middle level educators, gave an explanation to contradict the criticisms. One explanation included the unclear purpose of creating middle schools in most school districts.

> If you check most school board policies, I suspect you will find no statement of either the purpose of middle schools or the results they should achieve. Yes, you may find some vague language about meeting students' developmental needs or preparing them for high school, but I doubt there is the clear direction necessary to guide middle school educators or hold them accountable for results.... It is unlikely they will have a clear, concrete vision for middle schools or a coherent strategy for how to achieve it. Many school systems converted to middle schools not because the school board or the superintendent understood and were committed to the philosophical, educational, and operational reasons for doing so, but because a school system committee recommended it. (p. 2)

Another reason according to Mizell (1999) that middle schools have not lived up to expectations would be simply that many middle schools are not true middle schools. There had been a push for schools that house early adolescents to change their names to middle schools, but those schools had not implemented the tenets of middle school philosophy with fidelity or consistency.

> Other schools have to a greater or lesser extent tried to implement many of the commonly accepted practices of middle schools but for various reasons they have not implemented them effectively, or understood how to use them to improve student achievement (p. 2)

Mizell cited an example of teachers placed on a team and given 150 to 175 students with the assumption that these teachers will have the knowledge, the expertise, the personalities, and the commitment to create learning conducive to middle grades

students. If assignment to a team had not been paired with training, opportunity, and permission to make changes in curriculum, scheduling, and the dismantling of other sacred cows, then increases in student achievement would not result. The title, middle school, would not ensure appropriate practices are regulated, revised, and revisited according to middle school philosophy or current research on best practices.

Also, a level of complacency had set in at some middle schools once structures have been established for a period of time according to Mizell (1999). There might be a feeling of success and accomplishment to have the components of middle school concept implemented -- the task had been completed, but implementation of organizational structures would be considered just one piece of the puzzle. For students to benefit physically, academically, socially, and emotionally, results of implementation should be continually monitored and refocused, which would circle back to Mizell's the first reason, a lack of clear focus.

Lastly, middle schools might not be reaching their potential in providing public proof of the benefits of middle school concept because of four issues:

- expectations and support of students,
- expectations, support, and accountability of teachers and administrators,
- students' preparation for and access to challenging academic content, and
- students' engagement in meaningful learning experiences. (Mizell, 1999)

For early adolescents, the middle school concept worked when it was implemented with fidelity by specially prepared teachers who possessed the knowledge, skills, and dispositions of effective middle grades teaching; was accompanied by a clear

focus, based on an inherent understanding of its purpose and fundamentals; and was supported by resources and research-based knowledge of teaching early adolescents. Recognizing, validating, and understanding the interconnectedness of biological changes and their affect on behavioral and cognitive changes should be at the heart of teaching young adolescents. Effective middle level education would require teachers who understood the rationale and implemented the middle school philosophy completely and intentionally. Middle school students have been characterized as unique, and so, too, should be the teachers who work with them.

Level of Implementation and Effectiveness of Middle School Philosophy

In 1994, George and Shewey measured the implementation and effectiveness of middle school concept in the nation's schools. The study sought to re-examine and update findings of an earlier study (George & Oldaker, 1985). The 1985 study found when middle school components were implemented, there were positive outcomes in academic achievement, student behavior, school learning climate, faculty morale, staff development, among other factors. The 1985 study did not compare the effectiveness of other programs or organizational structures to the middle schools studied, and did not indicate whether the positive results of the limited sample schools were enjoyed by other middle level institutions.

The 1994 study (George & Shewey) sampled 300 middle schools across the nation who had taken the task of implementing middle school philosophy seriously. The sample was intentionally not random. Also, the study examined schools that had "been

middle schools for less than five years and those which had been middle schools for more than five years" (p. 60). Respondents indicated components of middle school philosophy that had been implemented in the school and demonstrated a strong commitment to those components. The study reflected an increase in implementation of middle school components as compared to the 1985 study. Findings showed most of the middle school components were implemented and were integral to the effectiveness of the schools' educational programming.

> When implemented effectively, the middle school concept increasingly leads to substantially positive outcomes in virtually every area of concern to educators and parents, including academic achievement. Improvement can also be noted in a range of aspects of student deportment, such as attendance, tardiness, referrals to the office for discipline, theft, vandalism, etc. Middle school programs improved relationships between: students of different racial and ethnic groups; parents and teachers; teachers and students; and, teachers with other teachers, especially between elementary, high school, and those at the middle level. (George & Shewey, 1994, p. 110).

The authors continued to spell out positive outcomes of middle school philosophy on educators and students.

> Accumulating evidence suggests that, when the essential elements of an exemplary middle school are thoroughly and effectively implemented, the outcomes are almost always positive. We suggest that research conducted in situations in which the effective implementation of required components can be

> documented will increasingly reflect the desired outcomes of middle school education: increased academic achievement, more wholesome personal development, and more positive group citizenship. (George & Shewey, 1994, p. 115)

According to this comprehensive study, middle school concept had demonstrated positive outcomes for the early adolescents and the teachers who work with them.

In 1989, a groundbreaking resource was published; "it strengthened an emerging movement then largely unrecognized by policymakers, building support for educating young adolescents through new relationships among schools, families, and community institutions, including those concerned with health" (Jackson & Davis, 2000, p. x). *Turning Points: Preparing American Youth for the 21st Century,* offered recommendations for educating young adolescents by consolidating 80 years of research on middle grades education. Focus areas of recommendations included: the establishment of smaller learning communities, the implementation of inquiry-based instruction, the delivery of a common core of knowledge, the utilization of teaching techniques appropriate for the developmental needs of the age group, the requirement of specialized teacher preparation, the implementation of health education with direct application to life sciences, and the cultivation of connections between school, family and community. *Turning Points* became a framework for educators and policymakers and justified the implementation of middle school concept as an effective educational delivery system for middle level students.

A decade later, *Turning Points 2000: Educating Adolescents in the 21st Century* took the original framework of *Turning Points*, added a research base, and developed a practitioner-friendly guidebook to support efforts in implementing middle school philosophy.

> Our goal was to integrate what is known from education research and practice within a coherent approach toward adolescent education that educators can use in their own efforts to transform middle grades schools. Over the past ten years, education research has made enormous strides in documenting "what works" to improve outcomes for students. There are few channels, however, for this information to reach middle grades educators. *Turning Points 2000* attempts to bridge that gap. (Jackson & Davis, 2000, p. xiii)

Synthesizing the research on effective middle grades educational programming, *Turning Points 2000* would ensure the success of every student by focusing on challenging academic experiences through collaborative environments where young adolescents learn about themselves and their world and become contributing citizens in our democracy. The recommendations of *Turning Points 2000* gave greater depth to the original recommendations from *Turning Points* by highlighting the research base and adding a focus on teacher preparation and sustained implementation. *Turning Points 2000* called for middle grades schools that:

- Teach a curriculum grounded in rigorous, public academic standards for what students should know and be able to do, relevant to the concerns of adolescents and based on how students learn best.

- Use instructional methods designed to prepare all students to achieve higher standards and become lifelong learners.
- Staff middle grades schools with teachers who are expert at teaching young adolescents, and engage teachers in ongoing, targeted professional development opportunities.
- Organize relationships for learning to create a climate of intellectual development and a caring community of shared educational purpose.
- Govern democratically, through direct or representative participation by all school staff members, the adults who know the students best.
- Provide a safe and healthy school environment as part of improving academic performance and developing caring and ethical citizens.
- Involve parents and communities in supporting student learning and healthy development. (Jackson & Davis, 2000, pp. 23-24)

Turning Points 2000 illustrated the importance of implementing middle level philosophy with integrity and sustainability. Only then, would young adolescents receive the appropriate educational experiences to help them fully grow physically, cognitively, and socio-emotionally. Becoming self-fulfilled, contributing members of democracy had been the ultimate goal of middle level concept from its inception in 1909. The historical evolution of the middle school concept had demonstrated, time and again, this philosophy would provide optimal learning environments and experiences for early adolescents, but the literature has also documented, over and over, the key to successful implementation rests in the quality of middle level teachers.

Competencies of Effective Teachers

Darling-Hammond (1997) in a summary of studies regarding teacher preparation stated, "When all is said and done, what matters most for students' learning are the commitments and capacities of their teachers" (p. 294). The author outlined what teachers need to know and be able to do -- standards. First, teachers should have subject matter knowledge and be able to flexibly apply that knowledge across disciplines. Second, teachers should have pedagogical content knowledge to make subject matter accessible to learners. Third, teachers should have knowledge of development. "Teachers should know how to encourage students' social, physical, and emotional growth as well as their cognitive development" (p. 295). Knowledge of development should include how students think and learn and behave along with their interests. Fourth, teachers should have "an understanding of differences that may arise from culture, language, family, community, gender, prior schooling, and the other factors that shape people's experiences" (p. 295). Darling-Hammond reinforced the essence of middle school philosophy.

With knowledge, teachers could see curriculum "through their students' eyes" in order to develop appropriate learning activities based on student interests and learning styles. Adapting and meeting the needs of learners encompassed a fifth standard: pedagogical learner knowledge. Another standard could include teacher knowledge of student motivation, learning, assessment, teaching strategies, and curriculum resources and technologies. On an interpersonal level, teachers should know how to collaborate with colleagues and how to foster collaboration among students. Lastly, teachers should

know how to analyze and reflect on their own professional practice, making revisions to the learning environment or activities. Again, Darling-Hammond (1997) made a direct connection between competence for all teachers and middle school philosophy.

The National Board for Professional Teaching Standards (2001) developed five core propositions (standards) focused on essential knowledge, skills, dispositions, and commitments of highly functioning teachers.

1. Teachers are committed to students and their learning.
2. Teachers know the subjects they teach and how to teach those subjects to students.
3. Teachers are responsible for managing and monitoring student learning.
4. Teachers think systematically about their practice and learn from experience.
5. Teachers are members of learning communities. (2001, pp. vi-vii)

The core standards have been refined to define accomplished teaching practice for 30 fields and four developmental levels of students (Early Childhood, Middle Childhood, Early Adolescence, Adolescence and Young Adulthood). Teachers seeking National Board Certification must choose a generalist certificate or a subject-specific certificate. Recipients of National Board Certification have demonstrated knowledge, skills, and dispositions through performance-based assessment methods including a portfolio and written exercises. A noteworthy component of NBPTS early adolescence/generalist has been the inclusion of a solid background in health. This component has not been included in all accreditation guidelines, although it is essential to the growth and well being of early adolescents.

An educational priority should be the training and hiring of qualified individuals to teach our youth.

> The creation of new and more rigorous standards for teachers is one sign of progress. These include standards that ensure teachers will know the subjects they teach and how to teach them to children; that they will understand how children learn and what to do when they are having difficulty and that they will be able to use effective teaching methods for those who are learning easily, as well as those who have special needs. (Darling-Hammond, 1997, p. 1)

Darling-Hammond and NBPTS determined standards for quality teachers, but how would those standards differ from elementary, middle, and high school teachers?

Characteristics of Effective Teachers

The movement to create professional standards for teaching incorporated characteristics of effective teaching and learning practices as well as competencies of teachers who effectively facilitate the learning of students. Hamachek (1999) summarized the literature regarding characteristics of effective teachers. Effective teachers ranked high on more behavior descriptions than less effective teachers:

1. a warm and friendly attitude with firm and reasonable expectations,
2. project an enthusiasm for their work
3. are by no means perfect, but students willing to tolerate imperfections
4. thoroughly grounded in their subject matter
5. ready to assume responsibility for student outcomes

6. know their students as individuals
7. provide definite study guidelines
8. able to challenge without being offensive and encourage without being condescending
9. give feedback that's personalized
10. take time to reflect on their work, their students and themselves as teachers

work on developing a positive rapport

able to be flexibly adaptive in instructional methodology to meet needs of students. (pp. 207-8)

These descriptors comprised competencies of all effective teachers, namely the knowledge, skills, and dispositions of effective teachers.

Beyond Competence: The Role of Personal Characteristics

Teachers should be seen as more than "content technicians" (Lipka & Brinthaupt, 1999, p. 225). Teacher preparation should go beyond a checklist of technical competencies that "signal successful completion of the program (p. 225). Teachers should be perceived as an orchestra conductor or choreographer" (Lipka & Brinthaupt, 1999, p. 225). Effective teachers should develop an awareness of self, a critical ingredient in the development of an effective teacher. "(H)ealthy concepts and positive self-esteem in teachers and students are prerequisites for effective teaching and learning in our classrooms" (Lipka and Brinthaupt, 1999, p. 228). Bruner (1990) also argued for the importance of self.

> The Self, then like any other aspect of human nature, stands both as a guardian of permanence and as a barometer responding to the local cultural weather. The culture, as well, provides us with guides and stratagems for finding a niche between stability and change: it exhorts, forbids, lures, denies, rewards the commitments that the Self undertakes. And the Self, using its capacities for reflection and for envisaging alternatives, escapes or embraces or reevaluates and reformulates what the culture has to offer. (p. 110)

Ten traits of highly effective teachers were introduced by McEwan (2002). The author created the list of traits through personal observation, a review of the literature, written teacher reflections, and student input. The first set of traits was categorized into as personal traits that show character. Those traits espoused style consistent with being mission-driven and passionate, positive and real, and functioning as a teacher-leader. Another set of teaching traits focused on the ability to implement and achieve -- getting results, what an effective teacher does. A sense of with-it ness, a personal unique style, motivational expertise, and instructional effectiveness fell into this category. The last category (intellectual traits that demonstrate knowledge, curiosity, and awareness or what and how an effective teacher thinks) encompassed sound pedagogical knowledge of content, street smarts, and a healthy and reflective mental life. McEwan (2002) acknowledged the role of self, the sense of humanness, the willingness to connect with students beyond content discussions as critical components of effective teaching. The author took a deeper look at what a teacher should know and be able to do and connected to the personal characteristics of teachers.

Sparks and Lipka (1992) also recognized there was more to teaching than simply content knowledge and classroom management. Effective teaching also included an affective component. The NBPTS standards did not did not include this component, nor do many teacher preparation programs. The identification of master teachers has been one means of improving classroom teaching; however, the focus on identification has been through the cognitive domain -- knowledge of content, theory, and pedagogy. Sparks and Lipka (1992) found students had a different view of master teachers than their teachers and their administrators. Students ranked teacher craftsman criteria highest (e.g., uses strategies to meet the needs of all students, gives positive reinforcement, monitors student progress, and provides feedback) higher than administrators and teachers who ranked commander criteria (e.g., demonstrates subject matter competence, maintains an organized and disciplined classroom).

Moreover, Sparks and Lipka (1992) furthered their original study and found "(t)eacher personality characteristics appear to be important factors to be considered when both teachers and student select master teachers, and specific characteristics are identifiable" (p. 309). Respondents included 29 secondary school teachers and 501 eighth through twelfth grade students. Respondents characterized a master teacher.

> A master teacher is described as a warm-hearted, socially outgoing individual who is attentive to people, generous in personal relations, and maintains interpersonal contacts. This person would be hard to fool, has a high drive level, and respects traditional ideas while being sensitive and intuitive. The teacher who

would fit this description provided students a warm, secure atmosphere in which to learn while providing limits and consistency. (p. 309)

The researchers called for more research combining both personal characteristics and effective instruction behaviors of master teachers including factorial designs with potential generalizability of results. A connection between effective practice, competency, and personal characteristics has yet to be studied. Also missing from the literature was the possible distinctive qualities of teachers who work with certain age groups -- namely early adolescents. Although the literature has encompassed the knowledge, skills, and dispositions necessary for effective teaching, an inventory of personal characteristics has yet to establish what differentiates middle level educators and their counterparts.

Effective Teachers for Early Adolescents

Effective middle school teachers, like all other teachers, have had the knowledge and dispositions necessary to educate their students. Unlike all other teachers, though, the middle school teacher must understand and appreciate the unique qualities of early adolescents. Caissy (1994) called for middle level teachers who have "qualified for their positions by having appropriate personal characteristics, a sound general education, and an interest in teaching and working with young people" (p. 151). Characteristics of teachers who "are more suited" to becoming middle school teachers should have the following traits:

- Teachers who work with middle school students "should genuinely like early adolescent children and have an interest and commitment to working with them.
- Teachers should be "knowledgeable about the nature, development, unique characteristics, and special needs of early adolescent children.
- A middle school teacher should be confident and secure in her/his own value system, have a strong self-concept, and be resilient to handle the unpredictabilities of young adolescents.
- "Middle-level teachers must also have personality traits that enable them to provide a consistent, secure working environment for early adolescent students."
- Teachers who work with middle school students must have a clear understanding of early adolescent problems, be sympathetic to those problems, and have the classroom management skills necessary to handle early adolescent behaviors.
- Flexibility, a sense of humor, and enthusiasm would also be "desirable" traits
- "Teachers of early adolescents should be knowledgeable about the particular methodologies and classroom teaching skills that work best with early adolescents." (pp. 151-155)

Caissy's (1994) catalog could be compared with the list of characteristics by Knowles and Brown (2000) that cover the knowledge, skills and dispositions of effective middle school teachers. Both sets of characteristics integrated a specific knowledge base of teaching and learning methodologies appropriate for early adolescents with the teacher's personal characteristics, but only hinted at how middle school teachers' personal characteristics might differ from other teachers.

An examination of personal characteristics was conducted by Arth, Lounsbury, McEwin, and Swaim (1995). The "16 positive characteristics that define and capture the special nature of middle level teachers" were field tested with 24 principals and 48 teachers of the middle level ranking each characteristic from desirable to critical and essential (p. 5). Five individual case studies were included. The study crossed 21 different states and included schools in varying levels of implementing middle school philosophy. The study sought to determine how middle school teachers perceive themselves according to the following characteristics. The Effective Middle Level Teacher

- Is sensitive to the individual differences, cultural backgrounds, and exceptionalities of young adolescents, treats them with respect, and celebrates their special nature.
- Understands and welcomes the role of advocate, adult role model, and advisor.
- Is self-confident and personally secure -- can take student challenges while teaching.
- Makes decisions about teaching based on a thorough understanding of the physical, social, intellectual, and emotional development of young adolescents.
- Is dedicated to improving the welfare and education of young adolescents.
- Works collaboratively and professionally to initiate needed changes.
- Establishes and maintains a disciplined learning environment that is safe and respects the dignity of young adolescents.
- Ensures that all young adolescents will succeed in learning.

- Has a broad, interdisciplinary knowledge of the subjects in the middle level curriculum and depth of content knowledge in one or more areas.
- Is committed to integrating curriculum.
- Uses varied evaluation techniques that both teach and assess the broad goals of middle level education and provide for student self-evaluation.
- Recognizes that major goals of middle level education include the development of humane values, respect for self, and positive attitudes toward learning.
- Seeks out positive and constructive relationships and communications with young adolescents in a variety of environments.
- Works closely with families to form partnerships to help young adolescents be successful at school.
- Utilizes a wide variety of developmentally appropriate instructional strategies.
- Acquires, creates, and utilizes a wide variety of resources to improve the learning experiences of young adolescents. (Arth et al. 1995, pp. 7-8)

The rating scale for Arth et al. (1995) was not designed to determine effective teaching qualities; instead, the scale was intended to show a connection between theses qualities and each other. Teachers (88%) rated characteristic seven (disciplined learning environment) as most critical and essential, while principals (100%) rated characteristic one (being sensitive to individual differences) as the most critical and essential.

The researchers concluded respondents looked at the characteristics through different lenses: teachers looked at the characteristics from the perspective of their own teaching practices, but principals looked at the characteristics from a hiring perspective.

Although the study found some distinctive qualities of good middle school teaching, it was limited by the nature of a self-reporting survey. Also, the study did not look at correlating those attitudes toward effective middle school teaching, knowledge of effective middle school teaching, and implementation of effective middle school teaching.

Specialized Preparation for Middle Level Teachers

Middle level teachers have still been prepared under a nineteenth-century behaviorist tradition, an apprenticeship model where students learn the knowledge and then practice their skills during student teaching, demonstrating competence through measurable and observable means (written and performance assessments). This model ignored the social context of teaching, that teachers teach as they have been taught, which might not be best practice or reflect current understandings of teaching and learning. Student teachers have been constantly negotiating between what they know from personal experience in school to what they experienced in pre-service preparation programs. They "combine their own experience in compulsory education and teacher education with their student teaching practice" (Britzman, 1986, p. 443).

Although a pre-service program might provide knowledge and experience in developmentally responsive teaching strategies, might promote interdisciplinary connections, and might recommend professional collaboration as part of professional growth; the reality has been this would not suffice as preparation for pre-service teachers in middle grades teaching roles. "Three important facts commonly shape our views and

experiences of secondary school teaching and learning. First, social control is a significant dynamic in classroom life. Second, curriculum is compartmentally organized. Finally, schools are hierarchically ordered" (Britzman, 1986, p. 444). The reality of teaching at the middle level may not match the elementary or secondary pre-service preparation despite the research on appropriate teaching and learning practices. "(t)he dominant organization of teacher education which presupposes an acceptance of the way things are, tends also to reinforce the ideas and images of education that prospective teachers bring to their training" (Britzman, 1986, p. 446).

Unfortunately, most middle school teachers have not received specialized preparation to work with young adolescents. One reason, could be an unavailability of quality middle level teacher preparation programs. Scales and McEwin (1994) found that from 2,139 middle school teachers, 71% did not believe a specialized preparation program was available. Although teachers and administrators have expressed a need for training, the request has still remained unfulfilled. In 1992, an eight-state study found only 17% of teachers working with fifth through ninth graders received middle level pre-service preparation. For those who did have pre-service preparation, almost one-half rated their preparation inadequate or poor. This study was the largest of its kind but did not examine the effectiveness of comprehensive programs versus weak programs. Since the *Windows* study, others have followed.

A follow-up study by the Center for Early Adolescence was conducted based on the 33 recommendations from the *Windows* study. The respondents, who participated in a two-part Delphi Study, and included leading middle grades teacher educators,

researchers, policymakers, and foundation representatives, as well as, practitioners. Respondents, with a 77% return rate, rated each of the 33 recommendations as to the degree the individual personally agreed with the recommendation and how important the recommendation was in strengthening middle grades teacher preparation. Results showed the highest ranking recommendations to include better understanding of the developmental characteristics and the social context of early adolescent; "greater variety in developmentally responsive teaching and assessment techniques, especially cooperative learning, interdisciplinary curriculum and team teaching, student exhibitions and portfolios;" more opportunities for pre-service teachers to practice and observe in middle school settings; and creating networks of professionals (p. 9).

The *Windows* study and the Delphi study initiated another study (Scales & McEwin, 1994). The follow-up study focused on the impact of high quality, comprehensive programs. States with separate and distinct middle level certification who had a large number of middle level major specializations were included. A comparison was made with teachers who had overlapping elementary or secondary certificates. The sample came from Georgia, Kentucky, Missouri, North Carolina, and Virginia. At the time of the study, these five states encompassed "57% of all undergraduate middle level preparation programs in the country" (Scales & McEwin, 1994, p. 12). Respondents were asked to rate their preparation according to seven-coursework and field experience components derived from the *Windows* and the Delphi studies. From the sample, only 23% of respondents received special preparation during their undergraduate years; a third of them had it at the graduate level. Respondents who had six or seven of the components

rated their preparation highly. Unfortunately, since a majority of respondents received their preparation from graduate programs, the "data suggest that it is a distinct minority of middle school teachers who initially come to that task well prepared for teaching young adolescents" (p. 52). Results showed inadequate connection to developmentally responsive teaching of young adolescents in pre-service preparation.

> More than 40% did not have coursework on how to teach young adolescents, more than half did not have coursework focusing on the curriculum and organization of the middle school, and nearly 60% did not have pre-student teaching field work or student teaching in the middle grades. Yet, they were all teaching in grades 6-8 middle schools. (Scales & McEwin, 1994, p. 52)

In addition, the study determined states that required overlapping middle level, elementary, and secondary certificates were less likely to provide comprehensive middle grades teacher preparation.

The attitudes of administrators and teachers toward specialized middle grades certification was measured in a national survey of 2, 876 randomly selected elementary, middle, and secondary schools that housed grades six through eight (DeMedio & Mazur-Stewart, 1990). A Likert survey asked respondents to rate their level of agreement on 15 different "requirements" for middle grade certification as well as who should receive that preparation -- administrators and/or teachers. Both teachers and administrators agreed that specialized preparation was both necessary and important, but there was disagreement as to who should receive such training. Both groups supported specialized training for teachers and counselors; however, teachers also included administrators

while administrators excluded themselves. Preferences in program requirements were consistent with gaining knowledge of the developmental needs of young adolescents and honing skills in creating appropriate learning opportunities.

Although the study supported a perceived need for specialized preparation of middle level teachers, results in this study should be considered limited for two reasons: 1) the "requirements" did not align with core practices of middle school philosophy, and 2) participants were from a variety of educational settings that crossed 30 states and perceptions could have been influenced by the settings. Some respondents came from elementary schools, some from middle schools, and some from secondary schools. There was no attempt neither at determining the impact of setting nor on the level of implementation of appropriates middle level education.

Specialized Middle Level Teacher Preparation in Iowa

The state of Iowa created a middle school endorsement similar to other states. The endorsement would allow a teacher to teach all subjects in their majors in grades five through eight except for art, industrial arts, music, reading, physical education, and special education. Several program requirements for the endorsement aligned with the core practices of effective middle level teaching, but several recommendations from the literature regarding specialized preparation were missing. All teachers who received this endorsement already have completed an elementary endorsement or a subject-centered secondary endorsement. This requirement would place Iowa's middle school endorsement with other states who supported overlapping endorsements rather than separate and

distinct endorsements at the elementary, middle, and high school levels. Required coursework in Iowa included: coursework in the growth and development of early adolescents; middle school design, curriculum, and instruction, "including, but not limited to, instruction in interdisciplinary teaming, pedagogy, and methods" social studies, mathematics, science, and language arts (State of Iowa Department of Education, 2001).

Although the opportunity was granted for educators to receive a middle school endorsement, the requirements would not provide enough information and practice to effectively prepare a teacher to teach early adolescents. Teachers would not have to do practicum hours at the middle level and would not have to take subject area courses especially designed to meet the developmental needs of transescents. As of the fall of 2001, only 16 out of the 31 post-secondary institutions even offered a middle school endorsement. Out of those 16, only 85 students received the endorsement as compared to 1668 teachers who received an elementary endorsement and 1804 secondary content endorsements that were granted (excluding K-12 endorsements, special education, administration, and superintendency endorsements).

At the middle level, teachers without appropriate young adolescent training deal with an additional stress factor. Teaching has been described as an isolated profession, not only for novice teachers but also for veterans. Most teachers learned how to teach by teaching, due to a lack of pre-service preparation. This situation has been exacerbated at the middle level. Teachers in the middle grades for the most part, learned to work with young adolescents through trial and error. Adding to the frustration for these teachers, a

resurgence in acceptance of middle school concept, once again, led to junior high schools transforming into middle schools. For teachers shifting to a middle school concept without specialized training, the stress level could be overwhelming.

Skillern, Richardson, Wallman, Prickett, and Marion (1990) measured stress levels for teachers moving from a traditional junior high school philosophy to that of a middle school philosophy. Three new middle schools in Kentucky opened although teachers did not know each other and were unfamiliar with middle school concept. Results found the top three general issues causing teacher stress were: increased length of the school day, a lack of communication, and middle school concept. The general issues included intra-school communication, constructing interdisciplinary units, classroom paperwork, exploratory content, and extra-curricular activities. Although this study was simplistic in nature, data from the Likert scale showed a need for more training in middle school concept.

Barriers to Specialized Preparation of Effective Middle Level Teachers

McEwin and Dickinson (1995) profiled 14 model teacher preparation programs which incorporate specialized training opportunities in middle grades education. The authors recognize the common belief of middle level education and acknowledge that multiple approaches to providing that preparation exist. Although the authors celebrated the14 universities cited in the discussion, they also provided a list of factors that might inhibit institutions of higher education, state departments of education, and other institutions to create and implement quality programs.

- Ignorance, the lack of knowledge about the special characteristics and needs of the age group
- Too few advocates at the university and other levels of the profession
- The desire for a plentiful supply of teachers who are licensed to teach any age group
- A lack of knowledge among the public about what middle level curriculum, teaching, and schooling should be like
- The cost of establishing new teacher preparation programs in a time of diminishing resources, which might mean that established programs receive fewer resources
- The limited number of exemplary middle level teacher preparation programs available to serve as models
- Problems, real and/or perceived, with other teacher preparation programs (e.g., lack of success, low prestige)
- A lack of demand in the field for specially prepared middle level teachers (i.e., the willingness of employers to settle for teachers prepared to teach in elementary and senior high schools)
- A lack of prestige for teaching this difficult and crazy age group
- The difficulty middle level teachers experience in trying to find graduate programs that focus on what middle level teachers need to know and be able to do
- The popular perception regarding the low appeal of teaching young children
- An interest in teaching a single subject area 'in depth'

- A low confidence level on the part of teachers in their ability to teach the age group effectively
- The general practice of ignoring the needs of young adolescents and their teachers, while the students "pass through a stage." (McEwin & Dickinson, 1995, pp. 2-3)

The authors cited 14 university programs that follow the middle school philosophy and effectively prepare teachers to enter middle school classrooms. "These youth need and deserve developmentally responsive schools staffed with knowledgeable and capable teachers who are expert at their profession, not strangers to middle level classrooms and the young adolescents who spend much of their lives there" (McEwin & Dickinson, 1995, p. 17). Model programs for pre-service specialized training have been developed but they still focus on the content, the pedagogy, the knowledge and skills. The sense of self, the personal characteristics have not been included in these exemplary programs.

A Vision of Excellence in Middle Level Teacher Preparation

McEwin, Dickinson, Erb, and Scales (1995) combined the literature supporting specialized preparation of middle level teachers, the research base supporting implementation of middle level core practices, and current professional teaching standards and conceived a vision of exemplary middle level teacher preparation. These principles lay a foundation for defining effective implementation of middle school concept in this study. The authors ascertained that "wise and experienced middle grades teachers integrate at least six areas of competence into their practice" (p. 10). The

principles (early adolescent development, middle grades curriculum, middle grades instruction, middle grades school organization, families and community relations, and middle grades teaching roles) are defined through criteria that encompass details of middle school philosophy and developmentally appropriate practice. Inherent in the criteria would be the necessary knowledge, skills, and dispositions for effective implementation of the areas of competence. The authors recognized a need for specialized preparation in order to increase the likelihood of successful implementation of middle school concept, thus, delivering a developmentally responsive education to early adolescents.

> Young adolescents are involved in a period of dynamic personal and social growth. The demands of physical growth, the search for identity, the expansion of intellectual horizons, the definition of life values -- all these aspects of development enter middle grades classrooms daily...Despite these challenges, the wise and experienced teacher looks forward to interacting with fun-loving, unpredictable, caring, altruistic, energetic, and concerned young people who possess unbounded senses of humor...Furthermore, these teachers understand that their role in relation to their students is one that celebrates the normal life progression of which early adolescence is a part. They know, accept, and prize their roles as models, coaches, and mentors for youth." (p. 11)

The authors hinted at the personal characteristics inherent in effective middle level teachers. Their vision included affective attributes to be fostered in a middle school teacher preparation program. Middle grades teachers should possess unique

characteristics, allowing for an appreciation for early adolescent developmental needs when designing appropriate learning experiences. Training for middle level teaching should include knowledge and skills in early adolescent development as well as content knowledge and curriculum development, but the personal qualities of effective middle level teachers should also be fostered and developed.

Since its inception as the junior high school movement, the middle school movement has promoted an educational philosophy grounded in the developmental needs of early adolescents. Those who held the best interests of young adolescents close to their hearts were the facilitators of the movement. G. Stanley Hall (1908) described the personal joy of being a middle level teacher.

> These years are the best decade of life. No age is so responsive to all the best and wisest adult endeavor. In no psychic soil, too, does seed, bad as well as good, strike such deep root, grow so rankly, or bear fruit so quickly or so surely. To love and feel for and with the young can alone make the teacher love his calling and respect it as supreme. (p. xix)

Surely, effective middle level teachers have distinctive attributes different from their peers. Research is needed to delineate and validate the unique personal characteristics of a teacher who has chosen to work with young adolescents, who could implement the middle school concept with integrity, who has been satisfied with the outcomes, who has received specialized training, who has been encouraged to work with early adolescents, and who will continue to work with them.

Chapter 3

METHODOLOGY

Population

Initially, a stratified random sample of middle level teachers in the state of Iowa was requested from the State of Iowa Department of Education in order to generalize findings to the greater population of all middle level teachers in the state of Iowa. The State of Iowa Department of Education produced a random sample of 300 from 250,000 teachers, public and nonpublic, who were currently practicing teachers in grades five through nine. The grade span was requested since some middle grades students were housed in elementary, middle, junior, and high school buildings. Grade configurations across the state could vary from K-5, K-6, K-8, 6-7, 6-8, 8-9, and 7-12. In some high schools, grant monies have allowed for 9th grade smaller learning communities. The span of grades five through nine also would include the age range that would align with the definition of early adolescence.

Materials

Survey

A survey instrument was developed based constructs pulled from the literature. Five summated scales were created: 1) importance of core teaching practices, 2) respondents' ability to perform core practices, 3) respondents' level of satisfaction that each core practice positively impacts students, 4) agency and choice, and 5) personal characteristics. Three scales related to core practices of effective middle level education

were adapted from *A Vision of Excellence: Organizing Principles for Middle Grades Teacher Preparation* (McEwin et al. 1995). The scale related to personal characteristics was derived from multiple sources. Created adjective pairs (semantic differentials) were used in scale construction to describe characteristics often anecdotally illustrated in the literature as personification of the effective middle level teacher. Adjective pairs were compared with the NEO Personality Inventory-Revised (Costa & McCrae, 1994). An adjective out of each pair was delineated as a theoretical match with middle level typology. Although the literature has only alluded to personal characteristics of effective middle level teachers, it was possible to assign adjectives as reflections of multiple researchers intentions as well as examine the stereotype of middle level teachers. Alignment of scale data was made to the following personal characteristics: abstract thinker, affectionate, curious, democratic, distractible, excitable, experimenting, flexible, forgiving, humorous, idealistic, immature, impulsive, independent, industrious, mischievous, optimistic, relaxed, risk-taking, self-assured, sociable, spontaneous, tender-minded, trusting, and unconventional.

Survey Instructions

A letter accompanying the mailed survey instrument explained the researcher's background as a middle level educator and current status as a doctoral candidate. Respondents were asked to complete the survey honestly. Completed surveys were sent via mail in return envelopes provided by Drake University. A tea bag accompanied each survey as appreciation for respondents' participation in the study.

Design and Procedure

Design Paradigm

This preliminary study incorporated quantitative and qualitative design elements. A quantitative design was chosen as the framework of the study. Since this study was examining a new direction in middle level research but was grounded in existing literature, a quantitative paradigm seemed logical. Cresswell (1994) identified criteria for selecting quantitative versus qualitative design. Criteria for quantitative design included the "Researcher's Psychological Attributes: comfort with rules and guidelines for conducting research and time for a study of short duration; and Nature of the Problem: a body of literature exists, known variables, and existing theories" (p. 9).

Open-ended questions were included in the instrument to allow for the exploratory nature of the study. Although a historical record of literature has supported implementation of middle level practices, the literature has only implied a list of personal characteristics could be associated with teachers who successfully implement the core practices of middle level philosophy. Cresswell (1994) called a combination design format, "dominant-less dominant" (p. 177). "In this design the researcher presents the study within a single, dominant paradigm with one small component of the overall study drawn from the alternative paradigm" (p. 177). Though, the dominant-less dominant design would inhibit a classical analysis of the data, a combination of approaches seemed appropriate for a preliminary study to determine the direction of a future study.

Pilot Study

A pilot study was conducted in May 2002, with 25 middle level teachers from a suburban middle school, to determine the reliability and validity of the survey instrument. The school was chosen because of travel convenience, the researcher's personal connection to the administrator and staff, and the researcher's knowledge of school-wide implementation of core practices of middle level teaching. Staff was asked at a faculty meeting to voluntarily complete the survey on their own time and to drop the survey off in an envelope in the building office within a week. Volunteers picked up a new pencil at the time of survey distribution. The administrator mailed the envelope of completed surveys to the researcher at the end of the week. Any participant from the pilot study school who was also chosen for the statewide random sample would be removed from the study.

The survey instrument given to pilot participants consisted of five summated scales: 1) importance of core teaching practices, 2) respondents' ability to perform core practices, 3) respondents' level of satisfaction that each core practice positively impacts students, 4) agency and choice, and 5) personal characteristics. The instrument was given as a pilot study to determine the reliability and validity of survey items. With 25 returned surveys, there were not enough respondents to apply higher order statistical solutions to the scales; however, scale and item analysis pointed to strong and sufficient reliability coefficients to suggest successful scale construction.

Results of Pilot Study

Implementation of core practices.

Each of the three scales associated with the implementation of core middle level practices --importance, ability, and satisfaction – contained 29 Likert-type items allowed participants to rate attitudes, perceptions and experiences. The same 29 middle level core practice items were used for each of the three scales. The importance scale asked respondents to rate how important each core practice was from very unimportant to very important. The ability scale asked respondents to self report their ability from unable to very able to perform the behavior. The satisfaction scale solicited respondents' level of satisfaction from very dissatisfied to very satisfied that each core practice positively impacted students. The importance scale had a reliability coefficient of alpha = .8930. The ability scale had a reliability coefficient of alpha = .8974. The satisfaction scale had a reliability coefficient of alpha = .9247.

Agency.

The agency scale was comprised of 10 Likert-type items where respondents marked from very untrue to very true their preference or choice (or lack of) of working at the middle level. The middle level agency scale had a reliability coefficient of alpha = .7423.

Personal characteristics.

The personal characteristics scale encompassed 25 adjective pairs (semantic differentials) ranging from 1 (low theoretical match to middle level typology) to 7 (high match to middle level typology), characteristics emulating hypothesized attributes of

effective middle level teachers. Respondents were asked to look at the word pairs and choose where they "fit" between the words. With 25 returned surveys, there were not enough respondents to apply higher order statistical solutions to the scale; however, all of the scale and item analysis pointed to strong and sufficient reliability coefficients to suggest successful scale construction (alpha = .8640).

Preliminary Study

Sample.

A stratified random sample was requested from the Iowa State Department of Education. A stratified random sample would "ensure proportionate representation of each segment in the overall sample" (Johnson, 1995, p. 285). The request included disaggregations by data: gender, age, race, urban, rural, suburban, as well as cross grade distribution. The mailing list received, while random, was not stratified due to statewide privacy statutes and unavailable personnel who could collate the sample data. The sample was not large enough to be proportionally representative of the total population of middle level teachers in the state. The study focused on resultant data collected from the sample with no expectation of generalizability of middle level teachers in the state of Iowa.

Timeline.

The survey instrument was constructed and piloted during the spring of 2002, to a convenient sample of 25 middle school teachers. No survey changes were needed due to sufficient reliability coefficients from resultant data. For the preliminary study, the Iowa Department of Education was contacted to provide a mailing list of a random sample of 300 middle level teachers in the state of Iowa. Middle level teachers were defined as

those teachers currently working as instructors in grades five through nine. A random sample was requested and received in July 2002. Survey instruments were mailed in January 2003 with a three-week turn-around deadline. Data analysis was conducted in March 2003. The study report was completed in April 2003.

Response rate.

A response rate of 65% was necessary for purpose of generalizability of results. The overall response rate for the study was 23% including 52 completed surveys and 16 uncompleted surveys returned.

Factors that might have affected response rate.

- Teachers were busy and chose not to complete the survey within the timeline.
- Teachers might not have perceived a personal connection to the study and chose not complete the survey.
- Respondents might have thought the survey had too many items and was too long to complete.
- The language of survey items might be unfamiliar to respondents.
- Teachers who were housed in elementary or high school buildings, although teaching in grades 5-9, might not have identified themselves at middle level teachers.

Data analysis.

Because all items in the survey instrument have been previously untested, data analyses on the pilot study provided initial internal consistency measures (coefficient alpha). Item and scale analysis on the preliminary study echoed initial results for scale reliability measures: 1) importance of core teaching practices (alpha = .9089,

standardized item alpha = .9106), 2) respondents' ability to perform core practices (alpha = .8778, standardized item alpha = .8806), 3) respondents' level of satisfaction that each core practice positively impacts students (alpha = .8747, standardized item alpha = .8807), 4) agency and choice (alpha = .6381, standardized item alpha = .6394), and 5) personal characteristics (alpha = .8495, standardized item alpha = .8435).

The dependent variable scale, ability to implement effective middle level teaching practices, was chosen as the predominant outcome variable for analysis in this preliminary study. Hypothetically, the higher the ability level of a middle level teacher to implement core practices, the more effective the teacher would be in the classroom.

Other data were obtained on the importance of core teaching practices and of satisfaction that each core practice positively impacts students. It was believed a teacher would be more likely to implement middle level core practices when pleased with the outcomes.

Three contextual independent variables were measured. First, the fourth scale (agency) involved background information on teacher choice. This variable measured the influences of past, current, and future career choices on a teacher and the relationship to her/his teaching position. The final primary independent variable consisting of 25 adjective word pairs (semantic differentials) required respondent-teachers to self-select personal characteristics most closely related to their view of themselves.

This preliminary study did not attempt to create a personality profile measure; the research purpose was to identify self-reported personal characteristics of a teacher more likely to implement middle level core practices. Other measures included demographic

independent variables to identify differences within and between groups of respondents based on group membership on the ability to implement core practices scale.

Chapter 4

ANALYSIS OF THE DATA

Primary Evidence

This preliminary study yielded quantitative findings regarding middle level teachers' perceptions on the level of importance of middle level core practices, their ability to implement core practices, their satisfaction with the outcomes of those practices, their individual level of agency, personal characteristics, and demographic information. Open-ended questions provided additional information to support quantitative findings.

Results of Demographic Items

Respondents were asked to mark where they best fit under each item. Demographic items were coded and reported as a nominal or ordinal level of measure. Interval or ratio level demographic items such as, "age," were re-coded into ordinal levels of measures for analysis. Where data were missing as a result of respondents not answering an item, no further action was taken and missing values were reported.

An ordinal level frequency distribution was used to collate the age of respondents. Results on the age of respondents have been presented in Table 1.

Table 1

Age of Respondents

Years	N	Frequency	Valid Percent
Up to 45	42	15	35.7%
45 to 52	42	13	31.0%
52 and Older	42	14	33.3%

Respondents were asked to note their gender. A nominal level frequency distribution was tabulated to record each response. The gender make up of the sample has been reported in Table 2.

Table 2

Gender of Respondents

Gender	Frequency	Valid Percent
Female	34	65.5%
Male	18	34.6%

Information on grade levels that respondents currently teach was gathered. Respondents were asked to record each grade they taught. Some respondents taught in multiple grade levels. A nominal level frequency distribution of the sample's teaching grade levels is given in Table 3.

Table 3

Grade Levels Currently Taught

Grade	N	Frequency	Valid Percent
5	51	12	23.5%
6	50	20	40.0%
7	50	25	50.0%
8	50	28	56.0%
9	50	16	32.0%

Respondents were asked to mark all middle level grades (5 through 9) that were housed in their school building. Results of responses are portrayed in the nominal level frequency distribution of Table 4.

Table 4

Grades Housed in Building

Grade	N	Frequency	Valid Percent
5	52	23	44.2%
6	52	34	65.4%
7	52	42	88.8%
8	52	41	78.8%
9	52	22	42.3%

The sample of teachers came from urban, suburban, and rural school settings. Respondents chose the descriptor that best described their school. Results of the nominal level frequency distribution of urban, suburban, and rural school settings can be seen in Table 5.

Table 5

School Settings

Setting	N	Frequency	Valid Percent
Rural	52	39	75.0%
Suburban	52	2	3.8%
Urban	52	11	21.2%

Respondents provided information regarding the number of years they have been teaching. Responses were collated and re-coded in an ordinal level frequency distribution. Findings are illustrated in Table 6.

Table 6

Number of Years Teaching

Years Teaching	N	Frequency	Valid Percent
Up to 5	51	17	33.3%
5 to 15	51	17	33.3%
15 and Over	51	17	33.3%

A crosstabulation was completed for information regarding the amount of years teaching in the current position and the amount of years teaching at the middle level.

Results of the crosstabulation on the amount of years teaching in the current position and the amount of years teaching at the middle level are shown in Table 7.

Table 7

Years at Current Position and Years Teaching Middle Level

Years Teaching in Current Position	Years Teaching Middle Level			
	Up to 5	5 up to 15	15 and Over	Total
Up to 4	14	3	2	19
	82.4%	17.6%	11.8%	37.3%
4 to 13	3	9	3	15
	17.6%	52.9%	17.6%	29.4%
13 and Over	0	5	12	17
		29.4%	70.6%	33.3%
Total	17	17	17	51
	100.0%	100.0%	100.0%	100.0%

Importance scale items.

Respondents' perceptions of the importance of middle level core practices were measured through 29 Likert-type items. Respondents were given four choices (ordinal level measurement) from very unimportant to very important. Items were aligned with the six competencies of wise and experienced middle grades teachers (McEwin et al. 1995, p. 10). Results of valid percents are provided in Tables 8 through 13.

Table 8

Importance of Early Adolescent Development

Middle Level Core Practices	Very Unimportant	Somewhat Unimportant	Somewhat Important	Very Important	Total[1]
Plan learning activities based on student developmental needs.	0.0%	0.0%	13.5%	84.6%	98.1%
Organize learning environment based on developmental needs.	0.0%	0.0%	34.6%	57.7%	92.3%
Know issues of student health, sexuality, and risk behaviors.	0.0%	5.8%	42.3%	46.2%	94.3%
Encourage students in developing their abilities, aptitudes, and pursuits.	0.0%	0.0%	15.4%	80.8%	96.2%

[1]Total percentage out of 52 possible respondents

Table 9

Importance of Middle Grades Curriculum

Middle Level Core Practices	Very Unimportant	Somewhat Unimportant	Somewhat Important	Very Important	Total[1]
Develop a balanced curriculum to meet student developmental needs.	0.0%	1.9%	21.2%	21.2%	94.3%
Develop a curriculum that includes a common core.	0.0%	0.0%	28.8%	28.8%	90.3%
Develop a curriculum that explores significant social issues based on student interests.	3.8%	17.3%	53.8%	53.8%	99.9%
Develop an integrated curriculum that connects all subject areas.	3.8%	5.8%	50.0%	50.0%	92.3%
Am skilled at leading student inquiry in at least two subject areas.	0.0%	7.7%	32.7%	32.7%	88.5%
Am skilled at professional collaboration in developing curriculum.	0.0%	7.7%	38.5%	50.0%	96.2%

[1] Total percentage out of 52 possible respondents

Table 10

Importance of Middle Grades Instruction

Middle Level Core Practices	Very Unimportant	Somewhat Unimportant	Somewhat Important	Very Important	Total[1]
Balance teacher decision making with student decision making.	1.9%	11.5%	50.0%	32.7%	96.1%
Use hands-on and minds-on learning activities.	0.0%	0.0%	11.5%	84.6%	96.1%
Plan instruction and assessment around learning targets or goals.	0.0%	0.0%	17.3%	80.8%	98.1%
Use up-to-date technology for instruction and assessment.	11.5%	46.2%	40.4%	0.0%	98.1%
Possess a varied set of teaching strategies that appeal to students.	0.0%	0.0%	21.2%	76.9%	98.1%

[1] Total percentage out of 52 possible respondents

Table 11

Importance of Middle Grades School Organization

Middle Level Core Practices	Very Unimportant	Somewhat Unimportant	Somewhat Important	Very Important	Total[1]
Work with an interdisciplinary team of teachers.	1.9%	7.7%	50.0%	38.5%	98.1%
Possess interpersonal communication, group problem solving, and team building skills.	0.0%	5.8%	32.7%	59.6%	98.1%
Serve as a student advisor in our student advisory program.	1.9%	25.0%	44.2%	28.8%	99.9%
Participate on site-based committees.	5.8%	17.3%	32.7%	36.5%	92.3%
Create a personalized learning environment for students.	0.0%	5.8%	36.5%	55.8%	98.1%

[1] Total percentage out of 52 possible respondents

Table 12

Importance of Families and Community Relations

Middle Level Core Practices	Very Unimportant	Somewhat Unimportant	Somewhat Important	Very Important	Total[1]
Am knowledgeable about my community and its resources.	0.0%	5.8%	53.8%	38.5%	98.1%
Have built strong connections with community groups and agencies.	0.0%	11.5%	57.7%	26.9%	96.1%
Collaborate with community health providers, youth organizations, and social service agencies.	3.8%	13.5%	50.0%	19.2%	86.5%
Encourage parental participation in the education of students.	0.0%	0.0%	11.5%	86.5%	98.0%

[1] Total percentage out of 52 possible respondents

Table 13

Importance of Middle Grades Teaching Roles

Middle Level Core Practices	Very Unimportant	Somewhat Unimportant	Somewhat Important	Very Important	Total[1]
Promote the physical, cognitive, and socio-emotional development of students.	0.0%	0.0%	32.7%	59.6%	92.3%
Have a deep, personal knowledge of the students I work with.	0.0%	1.9%	50.0%	44.2%	96.1%
Select, adapt, and create curricular experiences for diverse students.	0.0%	1.9%	40.4%	48.1%	90.4%
Assume a collective responsibility for educating all students.	0.0%	0.0%	30.8%	63.5%	94.3%
Create a community of learners.	0.0%	.0%	25.0%	73.1%	98.1%

[1] Total percentage out of 52 possible respondents

Ability scale items.

Respondents' perceptions of their ability to implement middle level core practices were measured through 29 Likert-type items. Respondents were given four choices (ordinal level of measurement) from unable to perform the behavior to very able to perform the behavior. Items were aligned with the six competencies of wise and experienced middle grades teachers (McEwin et al.1995, p. 10). Tabulation of results in the form of valid percents has been presented in Tables 14 through 19.

Table 14

Ability to Implement Early Adolescent Development

Middle Level Core Practices	Unable	Somewhat Able	Able	Very Able	Total[1]
Plan learning activities based on student developmental needs.	0.0%	7.7%	46.2%	46.2%	100.1%
Organize learning environment based on developmental needs.	1.9%	13.5%	50.0%	28.8%	94.2%
Know issues of student health, sexuality, and risk behaviors.	1.9%	23.1%	48.1%	26.9%	100.0%
Engage students in developing their abilities, aptitudes, and pursuits.	0.0%	13.5%	46.2%	36.5%	96.2%

[1] Total percentage out of 52 possible respondents

Table 15

Ability to Implement Middle Grades Curriculum

Middle Level Core Practices	Unable	Somewhat Able	Able	Very Able	Total[1]
Develop a balanced curriculum to meet student developmental needs.	0.0%	23.1%	40.4%	30.8%	94.3%
Develop a curriculum that includes a common core.	0.0%	11.5%	46.2%	30.8%	88.5%
Develop a curriculum that explores significant social issues based on student interests.	5.8%	21.2%	42.3%	19.2%	88.5%
Develop an integrated curriculum that connects all subject areas.	11.5%	23.1%	26.9%	30.8%	92.3%
Am skilled at leading student inquiry in at least two subject areas.	0.0%	5.8%	38.5%	46.2%	90.5%
Am skilled at professional collaboration in developing curriculum.	1.9%	13.5%	44.2%	38.5%	98.1%

[1] Total percentage out of 52 possible respondents

Table 16

Ability to Implement Middle Grades Instruction

Middle Level Core Practices	Unable	Somewhat Able	Able	Very Able	Total[1]
Balance teacher decision making with student decision making.	0.0%	11.5%	53.8%	30.8%	96.1%
Use hands-on and minds-on learning activities.	0.0%	3.8%	32.7%	59.6%	96.1%
Plan instruction and assessment around learning targets or goals.	0.0%	1.9%	50.0%	46.2%	98.1%
Use up-to-date technology for instruction and assessment.	1.9%	28.8%	36.5%	32.7%	99.9%
Possess a varied set of teaching strategies that appeal to students.	0.0%	3.8%	42.3%	51.9%	98.0%

[1] Total percentage out of 52 possible respondents

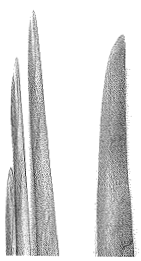

Table 17

Ability to Implement Middle Grades School Organization

Middle Level Core Practices	Unable	Somewhat Able	Able	Very Able	Total[1]
Work with an interdisciplinary team of teachers.	5.8%	21.2%	40.4%	32.7%	100.1%
Possess interpersonal communication, group problem solving, and team building skills.	1.9%	17.3%	32.7%	42.3%	94.2%
Serve as a student advisor in our student advisory program.	9.6%	11.5%	36.5%	21.2%	78.8%
Participate on site-based committees.	3.8%	15.4%	32.7%	42.3%	94.2%
Create a personalized learning environment for students.	0.0%	15.4%	44.2%	36.5%	96.1%

[1] Total percentage out of 52 possible respondents

Table 18

Ability to Implement Families and Community Relations

Middle Level Core Practices	Unable	Somewhat Able	Able	Very Able	Total[1]
Am knowledgeable about my community and its resources.	0.0%	23.1%	42.3%	34.6%	100.0%
Have built strong connections with community groups and agencies.	5.8%	25.0%	46.2%	21.2%	98.2%
Collaborate with community health providers, youth organizations, and social service agencies.	9.6%	26.9%	48.1%	3.8%	88.4%
Encourage parental participation in the education of students.	0.0%	11.5%	53.8%	34.6%	99.9%

[1] Total percentage out of 52 possible respondents

Table 19

Ability to Implement Middle Grades Teaching Roles

Middle Level Core Practices	Unable	Somewhat Able	Able	Very Able	Total[1]
Promote the physical, cognitive, and socio-emotional development of students.	0.0%	11.5%	40.4%	40.4%	92.3%
Have a deep, personal knowledge of the students I work with.	0.0%	9.6%	50.0%	36.5%	96.1%
Select, adapt, and create curricular experiences for diverse students.	1.9%	15.4%	51.9%	21.2%	90.4%
Assume a collective responsibility for educating all students.	0.0%	7.7%	50.0%	38.5%	96.2%
Create a community of learners.	0.0%	9.6%	0.0%	38.5%	98.1%

[1] Total percentage out of 52 possible respondents

Satisfaction scale items.

Respondents' satisfaction that each core practice positively impacted their students was measured through 29 Likert-type items. Respondents were given four choices (ordinal level of measurement) from very dissatisfied to very satisfied. Items were aligned with the six competencies of wise and experienced middle grades teachers (McEwin et al.1995, p. 10). Tabulation of results in the form of valid percents has been presented in Tables 20 through 25.

Table 20

Satisfaction of Early Adolescent Development Impact on Students

Middle Level Core Practices	Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	Total[1]
Plan learning activities based on student developmental needs.	0.0%	71.2%	26.9%	0.0%	98.1%
Organize learning environment based on developmental needs.	0.0%	13.5%	53.8%	26.9%	94.2%
Know issues of student health, sexuality, and risk behaviors.	0.0%	13.5%	51.9%	26.9%	92.3%
Engage students in developing their abilities, aptitudes, and pursuits.	0.0%	7.7%	53.8%	32.7%	94.2%

[1] Total percentage out of 52 possible respondents

Table 21

Satisfaction of Middle Grades Curriculum Impact on Students

Middle Level Core Practices	Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	Total[1]
Develop a balanced curriculum to meet student developmental needs.	0.0%	19.2%	51.9%	23.1%	94.2%
Develop a curriculum that includes a common core.	0.0%	9.6%	53.8%	25.0%	88.4%
Develop a curriculum that explores significant social issues based on student interests.	1.9%	26.9%	36.5%	21.2%	86.5%
Develop an integrated curriculum that connects all subject areas.	5.8%	21.2%	46.2%	17.3%	90.5%
Am skilled at leading student inquiry in at least two subject areas.	1.9%	1.9%	51.9%	34.6%	90.3%
Am skilled at professional collaboration in developing curriculum.	1.9%	15.4%	53.8%	25.0%	96.1%

[1] Total percentage out of 52 possible respondents

Table 22

Satisfaction of Middle Grades Instruction Impact on Students

Middle Level Core Practices	Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	Total[1]
Balance teacher decision making with student decision making.	0.0%	13.5%	50.0%	32.7%	96.2%
Use hands-on and minds-on learning activities.	0.0%	7.7%	51.9%	36.5%	96.1%
Plan instruction and assessment around learning targets or goals.	0.0%	5.8%	53.8%	38.5%	98.1%
Use up-to-date technology for instruction and assessment.	5.8%	19.2%	57.7%	11.5%	94.2%
Possess a varied set of teaching strategies that appeal to students.	0.0%	1.9%	59.6%	36.5%	98.0%

[1] Total percentage out of 52 possible respondents

Table 23

Satisfaction of Middle Grades School Organization Impact on Students

Middle Level Core Practices	Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	Total[1]
Work with an interdisciplinary team of teachers.	7.7%	17.3%	59.1%	21.2%	105.3%
Possess interpersonal communication, group problem solving, and team building skills.	3.8%	15.4%	38.5%	36.5%	94.2%
Serve as a student advisor in our student advisory program.	5.8%	17.3%	30.8%	19.2%	73.1%
Participate on site-based committees.	3.8%	7.7%	50.0%	28.8%	90.3%
Create a personalized learning environment for students.	0.0%	11.5%	57.7%	26.9%	96.1%

[1] Total percentage out of 52 possible respondents

Table 24

Satisfaction of Families and Community Relations Impact on Students

Middle Level Core Practices	Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	Total[1]
Am knowledgeable about my community and its resources.	0.0%	15.4%	48.1%	34.6%	98.1%
Have built strong connections with community groups and agencies.	1.9%	23.1%	53.8%	19.2%	98.0%
Collaborate with community health providers, youth organizations, and social service agencies.	1.9%	26.9%	44.2%	11.5%	84.5%
Encourage parental participation in the education of students.	5.8%	23.1%	48.1%	21.2%	98.2%

[1] Total percentage out of 52 possible respondents

Table 25

Satisfaction of Middle Grades Teaching Roles Impact on Students

Middle Level Core Practices	Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	Total[1]
Promote the physical, cognitive, and socio-emotional development of students.	0.0%	9.6%	46.2%	34.6%	90.4%
Have a deep, personal knowledge of the students I work with.	0.0%	3.8%	51.9%	40.4%	96.1%
Select, adapt, and create curricular experiences for diverse students.	1.9%	13.5%	59.6%	15.4%	90.4%
Assume a collective responsibility for educating all students.	0.0%	7.7%	53.8%	32.7%	94.2%
Create a community of learners.	1.9%	7.7%	65.4%	23.1%	98.1%

[1] Total percentage out of 52 possible respondents

Agency scale items.

Table 26

Level of Agency

Item	Very Untrue	Somewhat Untrue	Somewhat True	Very True	Total[1]
I prefer to work with middle level students to working with elementary or high school students.	7.8%	13.7%	37.3%	41.2%	100.0%
I obtained my current position by choice rather than by default/reassignment.	7.8%	7.8%	11.8%	72.5%	99.9%
I chose to pursue specialized training in middle level education as an undergraduate student.	39.1%	30.4%	28.3%	2.2%	100.0%
I chose to pursue specialized training in middle level education as a graduate student.	41.3%	13.0%	21.7%	23.9%	99.9%
While obtaining my undergraduate degree, I was encouraged by faculty to pursue middle level teaching.	63.3%	20.4%	10.2%	6.1%	100.0%

Item	Very Untrue	Somewhat Untrue	Somewhat True	Very True	Total[1]
While obtaining my graduate degree, I was encouraged by faculty to pursue middle level teaching.	52.5%	20.0%	17.5%	10.0%	100.0%
I often come to work excited about my job.	0.0%	3.9%	49.0%	47.1%	100.0%
I plan on staying at the middle level for the duration of my career.	10.0%	10.0%	32.0%	48.0%	100.0%
Not everyone is suited to teach middle level students.	0.0%	2.0%	13.7%	84.3%	100.0%
I am suited to teach middle level students.	0.0%	2.0%	32.0%	66.0%	100.0%

[1] Total percentage out of 52 possible respondents

Crosstabulation of Dependent Variable with Independent Variables

The association between the dependent variable (respondents' ability to implement core middle level practices) and the independent variable was measured through a crosstabulation. Missing data were replaced with an item mean assignment since less than 15% of case responses were missing in any of the variables added in the computation of the summated scale. Next, the summated dependent scale scores were re-coded into an ordinal level of measure by creating four categories by establishing cut points at the 25th, 50th, and 75th percentiles. Categories were re-coded as very little ability, some ability, able, and very able.

Gender.

To determine whether the relationship between respondents' ability to implement core middle level practices and gender was independent, a crosstabulation was conducted. The nominal by ordinal level of association statistic, Chi-square, was applied to determine the significance and strength of the relationship. Results are illustrated in Tables 27 and 28.

Table 27

Gender and Ability to Implement Middle Level Core Practices

Ability to Implement Core Practices	Gender		
	Female	Male	Total
Very Little Ability	7	7	14
	20.6%	38.9%	26.9%
Some Ability	9	3	12
	26.5%	16.7%	23.1%
Able	9	4	13
	26.5%	22.2%	25%
Very Able	9	4	13
	26.5%	22.2%	25%
Total	34	18	52
	100%	100%	100%

Table 28

Chi-square Test

	Value	df	Asymptotic Sig. (2-sided)
Pearson Chi-Square	2.124[1]	3	.547
Likelihood Ratio	2.083	3	.555
Linear-by-Linear Association	.864	1	.353
N of Valid Cases	52		

[1]4 cells (50.0%) have expected count less than 5. The minimum expected count is 4.15.

Setting.

To determine whether the relationship between respondents' ability to implement core middle level practices and the setting in which they are teaching was independent, a crosstabulation was conducted, and Chi-square was applied to determine the significance and strength of the relationship. Results of the crosstabulation can be seen in Tables 29 and 30.

Table 29

Setting and Ability to Implement Middle Level Core Practices

Ability to Implement Core Practices	Setting			
	Rural	Suburban	Urban	Total[1]
Very Little Ability	12	0	2	14
	30.8%	0%	18.2%	26.9%
Some Ability	10	0	2	12
	25.6%	0%	18.2%	23.1%
Able	9	2	2	13
	23.1%	100%	18.2%	25.0%
Very Able	8	0	5	13
	20.5%	0%	45.5%	25.0%
Total	39	2	11	52
	100.0%	100.0%	100.0%	100.0%

[1] Total percentage out of 52 possible respondents

Table 30

Chi-square Test

	Value	df	Asymptotic Sig. (2-sided)
Pearson Chi-Square	9.169[1]	6	.164
Likelihood Ratio	8.432	6	.208
Linear-by-Linear Association	2.386	1	.122
N of Valid Cases	52		

[1]8 cells (66.7%) have expected count less than 5. The minimum expected count is .46.

Number of years teaching.

To determine if the relationship between a respondents' ability to implement core middle level practices and the number of years teaching is independent, a crosstabulation was conducted and the ordinal by ordinal level of association statistic, Gamma, was applied to determine the significance and strength of the relationship. Results of the crosstabulation can be seen in Tables 31 and 32.

Table 31

Ability to Implement Middle Level Core Practices and Number of Years Teaching

Ability to Implement Core Practices	Years Teaching: Up to 11	11 up to 26	26 and Over	Total
Very Little Ability	3	5	6	14
	16.7%	29.4%	35.3%	26.9%
Some Ability	5	3	4	12
	27.8%	17.6%	23.5%	23.1%
Able	7	3	3	13
	38.9%	17.6%	17.6%	25%
Very Able	3	6	4	52
	17.6%	35.3%	23.5%	100.0%

Table 32

Symmetric Measure

	Value	Asymptotic Standard Error[1]	Approximate T[2]	Approximate Significance
Ordinal by Ordinal Gamma	-.105	.155	-.674	.500
N of Valid Cases	52			

[1] Not assuming the null hypothesis

[2] Using the asymptotic standard error assuming the null hypothesis

Number of years teaching at the middle level.

The ability to implement core middle level practices and the number of years respondents have been teaching at the middle level were also tabulated. A crosstabulation

combined results responses. The crosstabulation of respondents' ability to implement middle level core practices and years teaching at the middle level are given in Table 33 and 34.

Table 33

Ability to Implement Middle Level Core Practices and Years Teaching Middle Level

Ability to Implement Core Practices	Years Teaching Middle Level			
	Up to 5	5 up to 15	15 and Over	Total
Very Little Ability	4	3	6	13
	23.5%	16.7%	35.3%	25.5%
Some Ability	6	2	4	12
	35.3%	11.8%	23.5	23.5
Able	4	7	2	13
	23.5%	41.2%	11.8%	25.5%
Very Able	3	5	5	13
	16.7%	29.4%	29.4%	25.5%
Total	17	17	17	51
	100%	100%	100%	100%

Table 34

Symmetric Measures

	Value	Asymptotic Standard Error[1]	Approximate T[2]	Approximate Significance
Ordinal by Ordinal Gamma	.012	.174	.069	.945
N of Valid Cases	51			

[1] Not assuming the null hypothesis

[2] Using the asymptotic standard error assuming the null hypothesis

Number of years teaching in current position.

Respondents were asked to record how many years they had been teaching in their current middle level position. A crosstabulation of ability to implement middle level core practices and number of years teaching in the current position was performed. The crosstabulation of respondents' ability to implement middle level core practices and the number of years teaching at the current position are presented in Tables 35 and 36.

Table 35

Ability to Implement Middle Level Core Practices and Years Teaching at Current Position

Ability to Implement Core Practices	Years Teaching at Current Position			
	Up to 5	5 up to 15	15 and Over	Total
Very Little Ability	4	2	8	14
	21.1%	13.3%	44.4%	26.9%
Some Ability	5	3	4	12
	26.3%	20.0%	21.1%	23.1%
Able	6	6	1	13
	31.6%	40.0%	5.6%	25%
Very Able	4	4	5	13
	21.1%	26.7%	27.8%	25.0%
Total	19	15	18	52
	100.0%	100.0%	100.0%	100.0%

Table 36

Symmetric Measures

	Value	Asymptotic Standard Error[1]	Approximate T[2]	Approximate Significance
Ordinal by Ordinal Gamma	-.148	.176	-.835	.404
N of Valid Cases	52			

[1] Not assuming the null hypothesis

[2] Using the asymptotic standard error assuming the null hypothesis

Personal characteristics.

A crosstabulation of ability to implement middle level core practices and the personal characteristics was performed. The crosstabulation of respondents' ability to implement middle level core practices and the personal characteristics are presented in Tables 37 and 38.

Table 37

Ability to Implement Middle Level Core Practices and Personal Characteristics

	Personal Characteristic Match with Middle Level Typology				
	Not a Good Match	Some Match	Good Match	Very Good Match	Total
Very Little	8	5	0	1	14
Ability	61.5%	38.5%	0.)%	7.7%	26.9%
Some Ability	2	4	4	2	12
	15.4%	30.8%	30.8%	15.4%	23.1%
Able	1	2	4	6	13
	7.7%	15.4%	30.8%	46.2%	25%
Very Able	2	2	5	4	13
	15.4%	15.4%	38.5%	30.8%	25
Total	13	13	13	13	52
	100.0%	100.0%	100.0%	100.0%	100.0%

Table 38

Symmetric Measures

	Value	Asymptotic Standard Error[1]	Approximate T[2]	Approximate Significance
Ordinal by	.503	.128	3.760	.000*
Ordinal Gamma	52			
N of Valid				
Cases				

*Statistically significant at alpha .05 or less

Measures of Association Analysis of Mean Differences of Dependent (Middle Level Core Practices Scale) with Independent Variables

The dependent variable (middle level core practices) was tested against independent variables to test the hypotheses. The Independent-Samples t-test procedure was utilized to test research hypotheses on the independent variable Gender. A 95% confidence criterion or p (probability of statistically significant differences in means) value of .05 or less was established as the cut point, to minimizing the possibility of both Type I and Type II errors. A Levene's Test for Equality of Variance measures for equality of variance. If the significance statistic was greater than .05 then equality of variance was assumed. For there to be a significant difference between group means on the respondents' ability to perform core practices (dependent scale) on the basis of gender the significance (2T) measure must be less than .05. Results of measures of association tests on Gender are shown in Tables 39-41.

Gender.

Table 39

Group Statistics

Gender		N	Mean	Standard Deviation	Standard Error Mean
Able	Female	34	92.59	9.89	1.70
	Male	18	89.66	9.94	2.34

Table 40

Levene's Test for Equality of Variance

		F	Significance
Able	Equal variances assumed	.069	.794
	Equal variances not assumed		

Table 41

T-test for Equality of Means

	t-test for Equality of Means						
						95% Confidence Interval of the Difference	
Ability to Implement Core Practices	t	df	Sig (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	1.013	50	.316	2.93	2.89	-2.88	8.73
Equal variances not assumed	1.011	34.6	.319	2.93	2.89	-2.95	8.80

The One-way ANOVA (analysis of variance) procedure was applied to the data to test the research hypotheses on the remainder of the independent variables. This procedure was appropriate for independent variables with more than two groups or categories. A 95% confidence criterion or p (probability of statistically significant differences in means) value of .05 or less was established as the cut point, minimizing the possibility of both Type I and Type II errors, when making the decision to reject or fail to reject the null hypothesis for the remainder of the variables tested. Data are reported in Tables 42-55.

Setting.

Table 42

Descriptives: Setting

Setting	N	Mean	Std. Deviation	Std. Error
Rural	39	90.19	9.63	1.54
Suburban	2	92.65	.92	.65
Urban	11	96.30	10.76	3.24
Total	52	91.58	9.91	1.37

Table 43

ANOVA: Setting

Variance	Sum of Squares	df	Mean Square	F	Significance
Between Groups	322.48	2	161.24	1.69	.196
Within Groups	4685.69	49	95.63		
Total	5008.17	51			

Table 44

Descriptives: Age of Respondents

Age	N	Mean	Std. Deviation	Std. Error
Up to 45	15	91.85	10.33	2.67
45 up to 52	13	91.87	11.23	3.11
52 and Older	14	98.14	9.27	2.48
Total	42	90.95	10.11	1.56

Table 45

ANOVA: Age of Respondents

Variance	Sum of Squares	df	Mean Square	F	Significance
Between Groups	68.83	2	34.42	.325	.724
Within Groups	4124.58	39	105.76		
Total	4193.41	41			

Table 46

Descriptives: Years Teaching

Years Teaching	N	Mean	Std. Deviation	Std. Error
Up to 11	18	91.71	8.35	1.97
11 up to 26	17	93.66	11.22	2.72
26 and Over	17	89.36	10.16	2.46
Total	52	91.58	9.91	1.37

Table 47

ANOVA: Years Teaching

Variance	Sum of Squares	df	Mean Square	F	Significance
Between Groups	157.70	2	78.84	.80	.457
Within Groups	4850.48	49	98.99		
Total	5008.17	51			

Table 48

Descriptives: Years Teaching at the Middle Level

Years Teaching	N	Mean	Std. Deviation	Std. Error
Up to 5	17	91.87	9.46	2.30
5 up to 15	17	92.63	9.02	2.19
15 and Over	17	90.80	11.60	2.81
Total	51	91.77	9.91	1.39

Table 49

ANOVA: Years Teaching at the Middle Level

Variance	Sum of Squares	df	Mean Square	F	Significance
Between Groups	28.81	2	14.40	.142	.868
Within Groups	4885.12	48	101.77		
Total	4913.92	50			

Table 50

Descriptives: Years in Current Teaching Position

Years Teaching	N	Mean	Std. Deviation	Std. Error
Up to 4	19	92.82	9.90	2.27
4 up to 13	15	93.45	9.04	2.33
13 and Over	18	88.70	10.49	2.47
Total	52	91.58	9.91	1.37

Table 51

ANOVA: Years in Current Teaching Position

Variance	Sum of Squares	df	Mean Square	F	Significance
Between Groups	231.03	2	115.52	1.19	.314
Within Groups	4777.14	49	97.49		
Total	5008.17	51			

Table 52

Descriptives: Personal Characteristics Match with Middle School Theoretical Typology

Personal Characteristics	N	Mean	Std. Deviation	Std. Error
Not a Good Match	13	86.30	10.44	2.90
Some Match	13	88.63	8.75	2.43
Good Match	13	96.54	9.10	2.52
Very Good Match	13	94.84	8.44	2.34
Total	52	91.58	9.91	1.37

Table 53

ANOVA: Personal Characteristics Match with Middle School Theoretical Typology

Variance	Sum of Squares	df	Mean Square	F	Significance
Between Groups	932.91	3	310.97	3.66	.019*
Within Groups	4075.26	48	84.90		
Total	5008.17	51			

*Statistically significant at alpha .05 or less

Table 54

Descriptives: Level of Agency

Individual Level of Agency	N	Mean	Std. Deviation	Std. Error
Low Level	14	91.12	10.41	2.78
Some Level	13	92.50	12.72	3.53
Moderate Level	9	89.67	9.08	3.03
High Level	16	92.30	7.93	1.99
Total	52	91.58	9.91	1.37

Table 55

ANOVA: Level of Agency

Variance	Sum of Squares	df	Mean Square	F	Significance
Between Groups	54.84	3	18.28	.177	.911
Within Groups	4953.34	48	103.19		
Total	5008.17	51			

The Stepwise Linear Regression procedure was applied to data to find the independent variables (gender, age, years teaching, years teaching at middle level, years teaching at current position, setting, agency, and personal characteristics) that best predict dependent variable (ability to implement middle level core practices). Independent variables were entered and removed until the best-fit model was acquired. Three measures were extremely important when reading the Stepwise Linear Regression tables: 1) the Adjusted R Square measure (degree to which the selected independent variables explain the variance in the dependent variable), 2) the Significance measure of.05 or less, 3) the F (strength of the association measure), and 4) the Standardized Coefficient Beta measure (+ or - .100). Data are presented in Tables 56-60.

Predictive Model

Table 56

Independent Variables Selected and Removed from Stepwise Linear Regression

Model	Variables Selected	Variables Removed	Method
1	Personal Characteristic Match with Middle School Theoretical Typology		Stepwise (Criteria: Probability-of-F-to-select<=.050 Probability-of-F-to-remove>=.100).

Note. Dependent Variable: Ability to Implement Middle Level Core Practices

Table 57

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.344[1]	.119	.096	9.613

[1] Predictors: (Constant), Personal characteristic match with middle school theoretical typology

Table 58

ANOVA

	Variance	Sum of Squares	df	Mean Square	F	Significance
1	Regression	496.95	1	496.95	5.38	.026*
	Residual	3696.47	40	92.41		
	Total	4193.41	41			

Note. Predictors: (Constant), Personal characteristic match with middle school theoretical typology

Dependent Variable: Ability to implement middle level core practices

*Statistical significance at alpha .05 or less

Table 59

Coefficients

Model	Unstandardized Co-efficients		Standardized Coefficients	t	Significance
	B	Std. Error	Beta		
1 (Constant) Personal	83.59	3.51		23.84	.000
Characteristics Match with Middle School Theoretical Typology	3.09	1.33	.344	2.32	.026*

Note. Dependent Variable: Ability to implement middle level core practices

*Statistical significance at alpha .05 or less

Table 60

Excluded Variables

Model		Beta In	t	Significance	Partial Correlation	Collinearity Statistics Tolerance
1	Agency Scale	.047[1]	.312	.757	.050	.997
	Age	-.115[1]	-.768	.447	-.122	1.000
	Years Teaching	-.018[1]	-.119	.906	-.019	.998
	Years Teaching at Middle Level	-.040[1]	-.267	.791	-.043	.989
	Years in Current Position	-.146[1]	-.985	.331	-.156	.998
	Gender	-.056[1]	-.357	.723	-.057	.924

Note. Predictors: (Constant), Personal characteristic match with middle school theoretical typology

Dependent Variable: Ability to implement middle level core practices

Results of Open-Ended Questions

To gather additional data, respondents were given an opportunity to answer four open-ended questions.

1. Where did you receive your teacher education training?
2. Where did you receive your middle level education training?
3. What comments do you have about this survey?
4. What was not asked that might help in this research project?

Questions were designed to additional information to scale data. Although some of the questions regarding teacher education could have been included as demographic items, an open-ended format was chosen to allow respondents a place to write personal comments. Respondents' comments were collated and grouped according to common themes.

The first open-ended question asked respondents where they received their teacher education training? All respondents listed the specific institution where they received their education degrees. A frequency distribution of results regarding where respondents received teacher education training are illustrated in Table 61.

Table 61

Teacher Education Training

Degree	In-State Private Institution	Out-of-State Private Institution	In –State Regents Institution	Out-of-State Regents Institution
Bachelors Degree	22	5	16[1]	7[1]
Masters Degree	3	0	3	3
Total	25	5	19	10

[1]2 respondents received teacher education training in both an in-state and an out-of-state Regents institution.

Respondents were asked to write where they received their middle level education training. A frequency distribution was completed to collate open-ended responses. Data showed one respondent was currently working on a middle school endorsement; another respondent wrote "none;" two respondents received training from both an institution of higher education and district in-services; and three respondents acknowledged on-the-job

training through experience. Respondent data on middle level teacher education has been displayed in Table 62.

Table 62

Middle Level Education Training

	Same Institution as Degree	Different Institution than Degree	In-services and Conferences	No Specialized Training
Responses	36	5	6	9

The third open-ended question dealt with other comments respondents might have had regarding the survey. Other comments about the survey included six thematic categories. Three respondents acknowledged their level of ability or satisfaction was relative depending on the year and on district or state level expectations. Two respondents recommended an interview format for the entire survey to gather data in a more personalized fashion. Seven respondents who thought it too long or described items as vague or confusing critiqued the survey instrument. Two respondents expressed discomfort with the middle level – one has left the profession and one has considered leaving. Lastly, eight respondents were critical of the middle level core practices. These respondents thought some practices were not applicable or did not have the resources available to implement all of the core practices.

Finally, the last open-ended question granted respondents an opportunity to provide any other information they felt necessary to share. Themes covered factors involved with perceptions of agency and ability: district or state encouragement of implementation of core practices, building personnel who support implementation of core

practices, educational training for implementation of core practices, parental involvement, and reasons for entering the profession.

Data Analysis

Results of Hypotheses Testing

1. There would be a significant difference between group means on the respondents' ability to perform core practices (dependent scale) on the basis of gender.
    a. Female (Mean) = 92.59 and Male Mean = 89.66. (See Table 39.)
    b. t = 1.013 (See Table 41.)
    c. p = .316 (See Table 41.)

    The conclusion, since there was no difference based on gender, findings have failed to reject the null hypothesis.
2. There would be a significant difference between group means on the respondents' ability to perform core practices (dependent scale) on the basis of the setting of their school.
    a. Rural (Mean) = 92.59 / Suburban (Mean) = 89.66 / Urban (Mean) = 89.66 (See Table 42.)
    b. F = 1.69 (See Table 43.)
    c. p = .196 (See Table 43.)

    The conclusion would be to fail to reject the null hypothesis. There was no difference on the basis of the setting of their school.

3. There would be a significant difference between group means on the respondents' ability to perform core practices (dependent scale) on the basis of age.
    a. Up to 45 (Mean) = 91.85 / 45 up to 52 (Mean) = 91.87 / 52 and Older (Mean) = 98.14 (See Table 44.)
    b. F = .325 (See Table 44.)
    c. p = .724 (See Table 44.)

    The conclusion would be to fail to reject the null hypothesis because there was no difference on the basis of age.
4. There would be a significant difference between group means on the respondents' ability to perform core practices (dependent scale) on the basis of years in the teaching profession.
    a. Up to 11 (Mean) = 91.71 / 11 up to 26 (Mean) = 93.66 / 26 and Over (Mean) = 89.36 (See Table 46.)
    b. F = .800 (See Table 47.)
    c. p = .457 (See Table 47.)

    The conclusion must be to fail to reject the null hypothesis. No difference on the basis of years in the teaching profession was found.
5. There would be a significant difference between group means on the respondents' ability to perform core practices (dependent scale) on the basis of years teaching at the middle level.
    a. Up to 5 (Mean) = 91.87 / 5 up to 15 (Mean) = 92.63 / 15 and Over (Mean) = 90.80 (See Table 48.)

b. F = .142 (See Table 49.)

c. p = .868 (See Table 49.)

The conclusion was to fail to reject the null hypothesis since no difference on the basis of years in the teaching at the middle level was determined.

6. There would be a significant difference between group means on the respondents' ability to perform core practices (dependent scale) on the basis of years teaching in current position.

   a. Up to 4 (Mean) = 92.82 / 4 up to 13 (Mean) = 93.45 / 13 and Over (Mean) = 88.70 (See Table 50.)

   b. F = 1.19 (See Table 51.)

   c. p = .314 (See Table 51.)

   The conclusion should be to fail to reject the null hypothesis as there was no difference on the basis of years in the teaching in current position.

7. There would be a significant difference between group means on the respondents' ability to perform core practices (dependent scale) on the basis of the respondents' level of match on the personal characteristics scale.

   a. Not a Good Match (Mean) = 86.30 / Some Match (Mean) = 88.63 / Good Match (Mean) = 96.54 / Very Good Match (Mean) = 94.84 (See Table 52.)

   b. F = 3.66 (See Table 53.)

   c. p = .019* (See Table 53.)

The conclusion must be to reject the null hypothesis. A statistically significant difference on the basis of the respondents' level of match on the personal characteristics scale was established.

Statistical Significance

One of the seven hypothesized independent-dependent variable relationships produced a statistically significant difference in means between respondents on the basis of group membership, the personal characteristics scale. Resultant one-way ANOVA analysis on respondents' level of match between not a good match and a very good match indicated a statistically significant relationship between the higher the match and the greater the ability to implement middle level core practices. Examining the ordinal level crosstabulation of this relationship confirmed the conclusion. Respondents who were either not a good match (76.9%) or some match (69.4%) had either very little ability or some ability to implement middle level core practices.

Conversely, respondents who were either a good match (69.4%) or very good match (77.0%) were either able or very able to implement middle level core practices. When the Stepwise Linear Regression procedure was applied to data, the personal characteristics scale was the only independent variable retained in the predictive model. (See Tables 39 – 40, 52-53, and 56-60.)

Chapter 5

DISCUSSION

Discussion of Results

Although this preliminary study was limited due to a small number of responses, statistical significance was reached on one of the relationships – personal characteristics and ability to implement middle level core practices. Assumptions were made about the relationships between gender, grades taught, years in teaching, years at current position, years teaching middle level, setting of school, and grades housed in the building and a possible impact on the ability to implement middle level core practices. No statistical significant differences were found. This finding has meaning for teacher educators, researchers and middle level practitioners – effective implementation of middle level practices has not been shown to be dependent on experience in teaching, setting, or grade levels.

The overall expectation of this preliminary study was that underlying personal characteristics have existed and those characteristics could predict the implementation of effective middle level core practices. Since the literature on effective middle level teachers has only alluded to these personal characteristics, the identification and preliminary study of the relationship of personal characteristics and the ability to implement middle level core practices has provided an important step in the continuing research on middle level philosophy.

With a limited response number of 52, finding statistical significance in data analysis would be extremely difficult. Still, this preliminary study found that a set of

personal characteristics can be identified, extracted, and used to predict a teacher, a good theoretical match, who would have the ability to implement middle level core practices. The adjective pairs, though not able to provide individual predictability, did produce statistically significant predicability when used as a summated scale. Although the adjusted R squared measure merely predicts 10% of the variance, it was statistically significant at p=.026; meaning, personal characteristics as a summated scale were a good predictor. In the prediction, the standardized coefficient Beta of .344 (slope) indicated a moderately strong relationship between personal characteristics and ability to implement core practices. With more cases included in the sample representing a normal distribution, resultant data could show a much stronger relationship.

A larger sample would also enhance the generalizability of results across the entire population of effective middle level teachers. To obtain a return rate of at least 65%, multiple methods could be employed to increase responses. For example, follow-up mailings and the use of a more engaged audience like those attending a middle level conference would enhance the probability of more participation. Enticements to participants for providing their input could also add to the return rate. A higher return rate would allow for individual measurement of each personal characteristic and would make the agency scale available for data analysis.

The agency scale was truly affected by the small sample. Not enough respondents felt they were encouraged by faculty advisors to seek teaching at the middle level; therefore, a normal distribution was not obtainable. The agency scale would warrant further exploration to examine the relationship between a teachers' undergraduate and

graduate advisors influence on the choice to enter middle level teaching. The data should be monitored over time to determine through comparative analysis to see if agency and support from faculty also influence teachers' ability to implement core practices.

Recommendations

The data show a need for increased teacher preparation and awareness of the core practices of effective middle level education. In each of the six areas of competence (early adolescent development, middle grades curriculum, middle grades instruction, middle grades organization, families and community relations, and middle grades teaching roles) respondents showed a need for increased training and support. For example, only 46.2% reported they were very able to plan learning activities based on student developmental needs. This issue is essential in effective middle grades educational programming. Other core practices frequencies that demonstrate a need for increased training include:

- 23.1% of respondents reported unable or somewhat able to develop a balanced curriculum to meet student developmental needs.
- 27% of respondents reported unable or somewhat able to develop a curriculum that explores significant social issues based on student interests.
- 30.7% of respondents reported unable or somewhat able to use up-to-date technology for instruction and assessment.
- 27% of respondents reported unable or somewhat able to work with an interdisciplinary team of teachers.
- 11.5% of respondents reported unable or somewhat able to promote the physical, cognitive, and socio-emotional development of students.

well as providing training for the teaching staff. Several respondents reported in the open-ended questions that they receive middle level training at the building level or through their own reading. Many describe their middle level training as "on the job" learning. When teachers receive an insufficient level of training, implementation of core practices is inconsistent and inefficient. The vision of creating a learning environment that meets the unique needs of early adolescents is lost without a publicized and focused effort to require specialized middle level teacher training.

Provide personal development training in middle level teacher education programs.

Institutions of higher education can integrate development of the self into teacher education courses. Becoming self-aware and fostering personal growth give teachers the personal skills necessary to meeting the needs of early adolescents. The statistically significant findings of this study indicate a need for the implementation of self development opportunities in teacher training programs. The personal characteristics are strong predictors of teachers who report themselves able to implement middle level core practices (a =.000). Conversely, teachers who do not match the theoretical typology do not report high levels of ability to implement the core practices. There is a positive linear relationship between theorized personal characteristics and the ability to implement effective middle level core practices. Personal characteristics, their identification, validation, and growth are essential to provide early adolescents with teachers more likely to meet their educational needs.

Identifying, validating, and supporting the development of personal characteristics of effective middle level teachers will assist in the recruitment and retention of teachers. There is a reciprocal relationship between performance and satisfaction. When teachers feel prepared and self-fulfilled, they are more satisfied with their job performance. When they are satisfied with their job performance they feel more self-fulfilled.

Implications for Further Research

The findings of this preliminary study and implementation of the recommendations described in the previous section have implications for further research. First of all, a large-scale study should be conducted to confirm the results of this study and to look for generalizabilty through a larger respondent sample. Examination of the literature and preliminary findings of this study show the necessity to investigate the personal characteristics of effective middle level teachers. Without the identification of those characteristics middle level preparation programs cannot recognize, validate, and support the personal development of middle level teachers.

Secondly, a full-scale study of the correlation between personal characteristics and effective core practices for the elementary and high school teachers should be performed. A study of effective elementary and high school teachers personal characteristics can be compared to those of effective middle level teachers. Results have implications for the recruitment, retention, and training of teachers in each of those licensure areas.

Lastly, the relationship between individual teacher implementation of middle level core practices (and personal characteristics of those teachers) versus whole

building/district supported implementation should be explored. Some teachers are implementing many of the effective middle level core practices in isolation from their peers. An examination of the personal characteristics of isolated teachers and teachers who have building or district backing might show differences in personal characteristics.

Conclusion

> One of the most rewarding opportunities in education is working with young adolescents. They are at once sophisticated young adults in search of solutions to the world's greatest social problems and at the same time children searching for their favorite toy or personal belonging. They are an amalgam distinguished by a vast array of developmental characteristics. (Williamson, 2001, pp. 378)

Middle school students are unique to any other age group. Their physical, cognitive, and socio-emotional development distinguishes them from any other group of students. Teachers who choose to work with this age group admit it not an easy job. "Experienced teachers who have taught at various educational levels (grade school, middle school, and high school), consistently point to the middle level school as the most challenging" (Caissy, 1994, p. 150). Despite the challenges, effective middle level teachers welcome the personally rewarding task of teaching early adolescents. They witness the positive effects of middle level core practices on the academic and personal lives of early adolescents. Effective middle level teachers have made a conscious choice to work with this age group. Their knowledge, skills, and personal characteristics correspond to their perceptions of the importance of implementing middle level core practices, ability to

implement those practices, and their feelings of satisfaction in the positive impact those practices have on students.

The literature has hinted to unique personal qualities of effective middle level teachers but has not specifically defined those characteristics, has not analyzed those characteristics, and has not aligned those characteristics with implementation of middle level core practices. The question, what kind of special person is suited to effectively teach early adolescents, has not been answered.

The National Middle School Association has recognized six personal qualities for effective teaching at the middle level: energy, enthusiasm, sensitivity, fairness, and a sense of humor (1995, p. 10). In addition, these characteristics reciprocally require a positive view of self, flexibility, openness, respect, and the ability to collaborate with multiple people on multiple levels.

Johnson and Markle (1986) have looked at 18 indicators of middle level teacher competency. Beyond subject matter, classroom management, and instructional knowledge, the authors point to a positive self concept, warmth, optimism, enthusiasm, flexibility, spontaneous, and accepting. Caissy (1994), when describing effective middle level teachers, adds confidence, resilience, relaxed, respectful, caring, and a sense of humor to the personal characteristics list. Beyond theoretical, pedagogical, and methodological knowledge, effective middle level teachers emulate certain personal characteristics that correspond to the implementation of middle level core practices. Middle level teacher training programs should incorporate a multi-faceted approach to preparation of middle level teachers.

Beyond knowledge and skill development, middle level teacher training can integrate a self-awareness component where teachers, mentors, advisors, and faculty members work together to identify and encourage the development of the personal characteristics of effective middle level teachers. "The preparation and retention of quality middle level teachers continues to be a major concern throughout the United States" (Anfara, Rosenblum, & Mahar, 2002, p. 5). The continuation of effective middle level educational programming for young adolescents is dependent upon the recruitment, retention, and training of effective middle level teachers.

"The ultimate goal of middle grades teacher preparation programs is to prepare excellent teachers of young adolescents," but this preparation should include the development and nurturance of the personal characteristics of teachers. (McEwin et al.1995, p. 37). Gallagher-Polite (2001) encourages a holistic approach to preparing teachers by aligning questions to expectations of effective middle grades programs.

- If the school's mission is "success for all students," how do we also provide "success for all adults?"
- If the school's philosophy is to "meet the social, emotional, physical, and intellectual needs of young adolescents" do we do the same for staff?
- If the school is organized into "interdisciplinary teams" to create small communities of learning and support for students, do we promote teaming across the school?

- If the school provides an "integrated curriculum" to help students make connections between and across subject areas, is the same approach taken in staff development?
- If the school provides a "broad-based exploratory program" to allow students opportunity and choice, are adults allowed to make choices from a wide variety of options, or are all decisions made for them?
- If the school provides "students advocacy" through an advisory program and student personnel services, do we promote teacher advocacy, parent advocacy, or administrator advocacy as well?
- If the school monitors student and school progress through "various authentic and performance-based assessments," are teachers, staff, and administrators evaluated the same way?
- If people in the school modeled the middle school model in their daily interactions, they would bestow on their students, themselves, and one another the gifts of integrity, respect, truth, access, honor, and trust through the fidelity of a shared philosophy, the unity of teaming, the authenticity of integrated curriculum, opportunity through exploration, the dignity of advocacy, and the accountability of authentic assessment. (p. 51)

Preparation for middle grades teachers has to occur in context, where pre-service and in-service teachers experience, first hand, the middle level philosophy. Teachers are then able to practice the pedagogy, apply the theory, and reflect personally on the implementation of middle level core practices. Preparation and practice opportunities

have to incorporate the development of personal characteristics attributed to effective middle level teachers. Not only can teachers reflect on their practice, they need to reflect on the development of their self.

> In order to assist prospective teacher to deal with the anxiety and complexity associated with the decision to enter the teaching profession, teacher educators are revising traditional programs and courses to assist their students to consider and self assess whether they have the qualifications to be effective teachers in today's troubled schools. (Zehm, 1999, p. 36)

Effective teacher preparation integrates the development of self with the development of knowledge and skills. Without the human dimension of teacher development, many teachers enter the field unprepared to handle the stresses involved in the work of teaching. At the middle level, the inconsistent and sometimes erratic development of early adolescents compounds the new teachers' ability to manage the task of middle level teaching.

> (Teacher training) "needs to be focused on significant content learning and middle level schooling concepts, but also must focus far more than it does now on the dispositions it takes to be a middle level educator: risk-taking attitude, lack of fear of responsive and responsible change, and a grounding in moral perspectives of equity and diversity. (Dickinson & Butler, 2001, p. 325)

A focus on the development of self can be incorporated into middle level teacher training programs. Self-development is not an additional course; it is an essential feature of all courses. Supporting growth on personal characteristics is critical to effective middle level

teacher preparation. "Wise and experienced middle grades teachers are not merely outcomes of highly successful middle grades teacher preparation programs" (McEwin et al.1995, p. 9). Without specialized middle level teacher training programs, teachers are less likely to gain the knowledge, skills, attitudes and dispositions necessary for effective implementation of middle level core practices. Without the implementation of middle level core practices, early adolescents are less likely to experience educational programming that truly meets their physical, cognitive, and socio-emotional needs.

Who are the teachers best suited to teach young adolescents? A practicing middle level teacher has written an informal test to determine for teachers to self-determine their special place at the middle level.

> If you have no qualms about telling young adolescents to up their pants, spit out their gum, and get their hair out of their faces, even if these adolescents are not in your normal jurisdiction – on grocery lines, at fast food restaurants, at family reunions or at your spouse's boss' house, you might be a middle level educator.
>
> If you can detect gum chewing at 50 paces, by one movement of the jaw, you are a practiced middle level educator…
>
> If your peripheral vision range is now up to 240 degrees, you might be a middle level educator.
>
> If you can stroll down an aisle of young adolescents checking homework, and snarf a note from one, a skateboard catalog from another, and a Game boy from a third, without so much as disturbing the modulation of your voice as you explain

> the causes of the Civil War or the formula for the calculation of the volume of a cone, you might be a middle level educator.
>
> If you have successfully eliminated from your vocabulary all words and phrases which could be construed as having anything to do with pubescent body parts or things those parts could do with each other, such as: nut, ball, melon, jug, crack, hard, soft, limp, rubber, bone, French, stick, stroke, whack, poke, bang, feel, lick, insert, suck, or blow – then you most definitely are a middle level educator.
>
> And if, although people tell you, repeatedly, that you must be a saint, or that you must have such patience when they hear what you do for a living, and you are fully aware that you are where you are because, really, you never actually left adolescence in the first place, then you are definitely, a middle level educator. (Shepherd, 2003)

Early adolescents deserve no less than teachers who know them and know themselves. Through specialized middle level training, middle level teachers will gain the knowledge, skills, and dispositions necessary for successful teaching at the middle level. "The junior high school teacher might then really be educated to operate with the realistic awareness and skills needed to achieve the objectives which the junior high school has fervently sought for well over half a century" (Toepfer, 1965, p. 133). The founders of the middle school movement have envisioned an educational environment focused on meeting the needs of young adolescents, but their vision cannot reach true fruition without the recognition, validation, and development of the personal characteristics that set effective middle level teachers apart from their colleagues.

References

Alexander, W. H. (1963). The junior high school: A changing view. In R. David (Ed.), *Moving forward from the past: Early writings and current reflections of middle school founders* (pp. 3-13). Columbus, OH: National Middle School Association, & Pittsburgh, PA: Pennsylvania Middle School Association.

Anfara, V. A., Jr., Rosenblum, S., & Mahar, R. J. (2002, May). A middle school endorsement beats the odds to aid urban schools. *Middle School Journal, 33(*5), 5-13.

Arth, A. E., Lounsbury, J. H., McEwin, C. K., & Swaim, J. H. (1995). *Middle level teachers: Portrait of excellence.* Columbus, OH: National Middle School Association, & Reston, VA: National Association of Secondary School Principals.

Beane, J. A. (1993) *A middle school curriculum: From rhetoric to reality.* (2nd ed.). Columbus, OH: National Middle School Association.

Beane, J. A., & Brodhagen, B. L. (2001). Teaching in middle schools. In V. Richardson, (Ed.), *Handbook of research on teaching* (4th ed.) (pp. 1157-1174). Washington, D. C. : American Educational Research Association.

Borich, G. D. (1999). Dimensions of self that influence effective teaching. In R. P. Lipka, & T. M. Brinthaupt (Eds.), *The role of self in teacher development.* (pp. 92-117). Albany, NY: State University of New York Press.

Britzman, D. P. (1986, Nov.). Cultural myths in the making of a teacher: Biography and social structure in teacher education. *Harvard Educational Review*, *56*(4), 442-456.

Bruner, J. (1960). *The process of education.* New York: Vintage Books.

Bruner, J. (1990). *Acts of meaning.* Cambridge, MA: Harvard University Press.

Caissy, G. A. (1994). *Early adolescence: Understanding the 10 to 15 year old.* New York: Plenum Press.

Carter, K., & Doyle, W. (1996). Personal narrative and life history in learning to teach. In J. Sikula, (Ed.), *Handbook of research on teacher education,* (2nd ed.) (pp. 120-142). New York: Simon & Schuster Macmillan.

Costa, P. T., & McCrae, R. R. (1994). *NEO personality inventory-revised.* Odessa, FL: Psychological Assessment Resources, Inc.

Cresswell, J. W. (1994). *Research design: Qualitative and quantitative approaches.* Thousand Oaks, CA: Sage Publications.

Darling-Hammond, L. (1997). *The right to learn: A blueprint for creating schools that work.* San Francisco, CA: Jossey-Bass Inc.

Darling-Hammond, L., & Sclan, E. N. (1996). Who teaches and why: Dilemmas of building a profession for twenty-first century schools. In J. Sikula (Ed.), *Handbook of research on teacher education* (2nd ed.) (pp. 67-105). New York: Simon & Schuster Macmillan.

David, R. (Ed.) (1998). *Moving forward from the past: Early writings and current reflections of middle school founders.* Columbus, OH: National Middle School Association & Pittsburgh, PA: Pennsylvania Middle School Association.

DeMedio, D., & Mazur-Stewart, M. (1990, April). Attitudes toward middle grade certification: A national survey. *NASSP Bulletin, 74*(525), 64-71.

Dewey, J. (1900, 1902). *The school and society.* and *The child and the curriculum.* (Combined ed.) (1971). Chicago, IL: The University of Chicago Press.

Dewey, J. (1916). *Democracy and education.* New York: The Macmillan Company.

Dickinson, T. S., & Butler, D. A. (2001). On a good day everyone grows: Reflections on the reinvention of a school. In T. S. Dickinson, (Ed.) (2001). *Reinventing the middle school* (pp. 16-328). New York: RoutledgeFalmer.

Ducharme, E. R., & Ducharme, M. K. (1996). Needed research in teacher education. In Sikula, J. (Ed.). *Handbook of research on teacher education* (2nd ed.) (pp. 1030-1046). New York: Simon & Schuster Macmillan.

Eichhorn, D. H. (1967). New knowledge of 10-through 13-year-olds. In R. David (Ed.), *Moving forward from the past: Early writings and current reflections of middle school founders,* (pp. 43-53). Columbus, OH: National Middle School Association & Pittsburgh, PA: Pennsylvania Middle School Association.

Eichhorn, D. H. (1972). The emerging adolescent school of the future – Now. In R. David (Ed.), *Moving forward from the past: Early writings and current reflections of middle school founders* (pp. 54-71). Columbus, OH: National Middle School Association & Pittsburgh, PA: Pennsylvania Middle School Association.

Eichhorn, D. H. (1977). Middle school: An evolving idea. In David, R. (Ed.), *Moving forward from the past: Early writings and current reflections of middle school founders.* (pp. 72-77). Columbus, OH: National Middle School Association & Pittsburgh, PA: Pennsylvania Middle School Association.

Erb, T. O. (1997). Thirty years of attempting to fathom teaming: Battling potholes and hairpin curves along the way. In T.S. Dickinson & T.O. Erb (Eds.), *We gain more than we give: Teaming in middle schools* (pp. 19-59). Columbus, OH: National Middle School Association.

Erb, T. O. (Ed.). (2001). *This we believe...and now we must act.* Westerville, OH: National Middle School Association.

Gallagher-Polite, M. M. (2001). Hope for Sandy: Transformation points: A reinventive paradigm. In T. S. Dickinson (Ed.), (2001). *Reinventing the middle school* (pp. 3-55). New York: RoutledgeFalmer.

George, P., & Oldaker, L. (1985). *Evidence for the middle school.* Columbus, OH: National Middle School Association.

George, P. S., & Shewey, K. (1994). *New evidence for the middle school.* Columbus, OH: National Middle School Association.

Hall, G. S. (1908). *Adolescence its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion, and education.* New York: D. Appleton & Company.

Hamachek, D. (1999). Effective teachers: What they do, how they do it, and the importance of self-knowledge. In R.P. Lipka, & T.M. Brinthaupt (Eds.), *The role of self in teacher developmen.* (pp. 189-224). Albany, NY: State University of New York Press.

Inhelder, B., & Piaget, J. (1958). *The growth of logical thinking from childhood to adolescence: An essay on the construction of formal operational structures* (A. Parsons & S. Milgram, Trans.). (8th ed.). United States of America: Basic Books, Inc.

Jackson, A.W., & Davis, G. A. (2000). *Turning points 2000: Educating adolescents in the 21st century.* New York: Teachers College Press.

Johnson, A. G. (1995). *The Blackwell dictionary of sociology: A user's guide to sociological language.* Cambridge, MA: Blackwell Publishers, Inc.

Johnson, J. H., & Markle, G. (1986). *What research says to the middle level practitioner.* Columbus, OH: National Middle School Association.

Knowles, T., & Brown, D. F. (2000). *What every middle school teacher should know.* Portsmouth, NH: Heinemann, & Columbus, OH: National Middle School Association.

Lipka, R. P., & Brinthaupt, T. M. (1999). How can the balance between the personal and the professional be achieved? In R.P. Lipka & T.M. Brinthaupt (Eds.), *The role of self in teacher development* (pp. 225-228). Albany, NY: State University of New York Press.

Lounsbury, J. H. (1960). What keeps junior high from growing up? In R. David (Ed.), *Moving forward from the past: Early writings and current reflections of middle school founders* (pp. 106-109). Columbus, OH: National Middle School Association & Pittsburgh, PA: Pennsylvania Middle School Association.

Lounsbury, J. H. (Ed.). (1982). *This we believe.* Columbus, OH: National Middle School Association.

McEwan, E. K. (2002). *10 Traits of highly effective teachers: How to hire, coach, and mentor successful teachers.* Thousand Oaks, CA: Corwin Press.

McEwin, C. K., & Dickinson, T. S. (1995). *The professional practice of middle level teachers: Profiles of successful programs.* Columbus, OH: National Middle School Association.

McEwin, C. K., Dickinson, T. S., Erb, T. O., & Scales, P. C. (1995). *A vision of excellence: Organizing principles for middle grades teacher preparation.* Chapel Hill, NC: Center for Early Adolescenc & Columbus, OH: National Middle School Association.

McEwin, C. K., Dickinson, T. S., & Jenkins, D. M. (1996). *America's middle schools: Practices and progress, a 25 year perspective.* Columbus, OH: National Middle School Association.

Mead, G. (1934). *Mind, self, and society from the standpoint of a social behaviorist.* As cited in Borich, G. D. (1999). Dimensions of self that influence effective teaching. In R. P. Lipka, & T. M. Brinthaupt (Eds.), *The role of self in teacher development.* (pp. 92-117). Albany, NY: State University of New York Press.

Mizell, M.H. (1999, April). Remarks given at the Middle Grades Education Conference. Retrieved November 29, 2001, from http://www.middleweb.com/Hmsouth.html.

National Board for Professional Teaching Standards. (2001). *Early adolescence through young adulthood language arts/English* (2nd ed.). Arlington, VA: Author.

National Center for Health Statistics. (2000, September). New CDC report tracks trends in teen births from 1994-2000. Center for Disease Control. Retrieved March 8, 2003, from http://www.cdc.gov/nchs/releases/orfact/teenbirths.htm.

National Institute of Allergy and Infectious Diseases. (2001). *HIV infection in adolescents.* National Institutes of Health. Retrieved March 4, 2001, from NIH website: http://www.niaid.nih.gov/factsheets/hivadolescent.htm.

National Middle School Association. (2001). *Exemplary middle schools.* (Research Summary #4). Retrieved November 29, 2001, from http://www.nmsa.org/services/ressum4.htm

National Middle School Association. (1995). *Developmentally responsive middle schools.* Columbus, OH: Author.

National Middle School Association. (1986). *Professional certification and preparation for the middle level: A position paper of National Middle School Association.* Columbus, OH: Author.

Olson, L., & Viadero, D. (2002, January). Law mandates scientific research base for research. *Education Week, 21*(20), 1, 14-15.

Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula (Ed.), *Handbook of research on teacher education* (2nd ed.) (pp. 102-119). New York: Simon & Schuster Macmillan.

Scales, P. C. (1996). *Boxed in and bored: How middle schools continue to fail young adolescents -- and what good middle schools do right.* Minneapolis, MN: Search Institute.

Scales, P. C., & McEwin, C. K. (1994). *Growing pains: The making of America's middle school teachers.* Columbus, OH: National Middle School Association & Chapel Hill, NC: Center for Early Adolescence.

Shepherd, M. (2003). Personal communication Wormeli, R. (January, 27, 2003) *Day one and beyond: Practical matters for the new middle level teacher.* (in press). New York: Stenhouse.

Skillern, P. A., Richardson, M. D., Wallman, D. G., Prickett, R. C., & Marion, R. A. (1990, Nov.). Stress factors of middle school teachers. Paper presented at the Annual Meeting of the Mid-South Educational Research Association. New Orleans, LA. (ERIC Document Reproduction Service No. ED 344 297).

Sparks, R., & Lipka, R. P. (1992, May). Characteristics of master teachers: Personality factors, self-concept, locus of control, and pupil control ideology. *Journal of Personnel Evaluation in Education, 5*(3), 303-11.

State of Iowa Department of Education (2001) *Condition of education.* Des Moines, IA: Author.

Substance Abuse Mental Health Services Administration. (2001). *Anxiety disorders in children and adolescents.* United States Department of Health and Human Services. Retrieved March 4, 2001, from http://www.mentalhealth.org/publications/allpubs/CA-0007/default.asp.htm

Substance Abuse Mental Health Services Administration. (1999a). *National household survey on drug abuse: Monitoring the future.* United States Department of Health

and Human Services. Retrieved March 4, 2001, from http://www.health.org/govpubs/BLCD307/32d.htm

Substance Abuse Mental Health Services Administration. (1999b). *National strategy for suicide prevention.* United States Department of Health and Human Services. Retrieved March 4, 2001, from http://www.mentalhealth.org/suicideprevention.html

Surgeon General. (1999). The magnitude of youth violence. In *Youth violence: A report of the surgeon general.* United States Public Health Service. Retrieved from http://www.surgeongeneral.gov/library/youthviolence/chapter2/sec1.html#arrests.

Toepfer, C. F., Jr. (1965, October). Who should teach in junior high? In R.David (Ed.), *Moving forward from the past: Early writings and current reflections of middle school founders.* (pp. 129-133). Columbus, OH: National Middle School Association & Pittsburgh, PA: Pennsylvania Middle School Association.

Vygotsky, L. S. (1978). *Mind in society.* Cambridge, MA: Harvard University Press.

Williamson, R. D. (2001). Middle level education. In V. Richardson, (Ed.), *Handbook of research on teaching* (4th ed.) (pp. 378-409). Washington, D.C.: American Educational Research Association.

Woolfolk, V. (1995). *Educational psychology* (6th ed.). Boston, MA: Allyn & Bacon.

Zehm, S. H. (1999). Deciding to teach: Implications of a self-development perspective. In R.P. Lipka, & T. M. Brinthaupt (Eds.), *The role of self in teacher development* (pp. 36-52). Albany, NY: State University of New York Press.

Subject: Re: Permission from doctoral student
Date: Friday, July 26, 2002 6:39:42 PM
Sender: Thomas Dickinson <esdickin@isugw.indstate.edu>
To: kcrabtree@aea11.k12.ia.us

Kristen:

You need permission from the primary author, Dr. C. Kenneth McEwin of Appalachian State University, rather than from one of the co-authors. Dr. McEwin also secured the grant from the Center for Early Adolescence which sponsored the publication so he is the most appropriate individual to obtain written permission to use the materials.

You can contact Dr. McEwin at

1-828-262-2200

and at

mcewinck@appstate.edu

Good luck with your efforts.

Tom Dickinson

>>> Kristen Crabtree <kcrabtree@aea11.k12.ia.us> 07/26/02 18:19 PM >>>
Dear Sir,

As a middle level advocate and practitioner, I am focusing my dissertation work on middle level teachers. I am examining the relationship between self-attributed personal characteristics of middle level teachers and highly effective middle level practices. I ask your permission to use the descriptors for a "wise and experienced middle grades teacher" from A Vision of Excellence: Organizing Principles for Middle Grades Teacher Preparation as part of my study.

To create a survey instrument, I have taken the descriptors under the six areas of competence, have rewritten them in the first person, and will require respondents to rate themselves on a four-point scale in three specific areas: how important each statement is to the participant, how able each participant is to perform the behavior, and the participant's level of satisfaction.

This component of the survey will be compared to demographic data and two other sections: the unique nature of middle level teachers and personal characteristics of middle level teachers. I have two goals in this research: 1) to validate middle level teachers as a highly trained, talented, engaging, population, truly sensitive to the needs of early adolscents; and 2) to address the notion that highly effective middle level teachers can be identified and supported in pre-service education programs.

My dissertation work is sponsored by Drake University in Des Moines, Iowa as the university plans a revision of their middle level endorsement. I will survey a random sample of 300 middle level teachers (provided by our state department of education) from grades five to nine across Iowa. Although the sample is limited, I hope the results will provide preliminary evidence leading to a larger scale study.

Attached are the items I wish to use from your work, A Vision of Excellence: Organizing Principles for Middle Grades Teacher Preparation. I have made some changes in language for clarity, and combined some

escriptors in order to accommodate spacing issues. My intent is to aintain the integrity of your thoughts and beliefs while making the nstrument user-friendly.

our permission will be included as part of my Human Subjects Research eview documentation as well as an appendix in the final written roduct. Please feel free to edit the items in your response. If you ave questions or would like to see the entire survey, don't hesitate to sk. I look forward to hearing from you and will make the data available if you are interested.

hank you,

risten Crabtree
306 School Street
es Moines, IA 50311
.5-274-3040
rabtree@aea11.k12.ia.us

Subject: RE: Permission for dissertation
Date: Monday, August 26, 2002 10:38:40 AM
Sender: Erb, Thomas O <thomaserb@ukans.edu>
To: 'Kristen Crabtree' <kcrabtree@aea11.k12.ia.us>

Kristen,

You have my permission to use material from A Vision of Excellence as specified in the attachment to your e-mail. I would be very interested in your results. Please, do send me a copy of your findings at the conclusion of your study.

Best wishes,

Thomas O. Erb
Professor
University of Kansas
421 J.R. Pearson Hall
1122 West Campus Road
Lawrence, KS 66045

> ----------
> *From: Kristen Crabtree*
> *Reply To: Kristen Crabtree*
> *Sent: Monday, August 26, 2002 7:51 AM*
> *To: thomaserb@UKANS.EDU*
> *Subject: Permission for dissertation*
>
> *<<File: Vision of Excellence items.doc>>*
> *Dear Sir,*
>
> *As a middle level advocate and practitioner, I am focusing my dissertation work on middle level teachers. I am examining the relationship between self-attributed personal characteristics of middle level teachers and highly effective middle level practices. I ask your permission to use the descriptors for a "wise and experienced middle grades teacher" from A Vision of Excellence: Organizing Principles for Middle Grades Teacher Preparation as part of my study.*
>
> *To create a survey instrument, I have taken the descriptors under the six areas of competence, have rewritten them in the first person, and will require respondents to rate themselves on a four-point scale in three specific areas: how important each statement is to the participant, how able each participant is to perform the behavior, and the participant's level of satisfaction.*
>
> *This component of the survey will be compared to demographic data and two other sections: the unique nature of middle level teachers and personal characteristics of middle level teachers. I have two goals in this research: 1) to validate middle level teachers as a highly trained, talented, engaging, population, truly sensitive to the needs of early adolscents; and 2) to address the notion that highly effective middle level teachers can be identified and supported in pre-service education programs.*
>
> *My dissertation work is sponsored by Drake University in Des Moines, Iowa as the university plans a revision of their middle level endorsement. I will survey a random sample of 300 middle level teachers (provided by our state department of education) from grades five to nine across Iowa. Although the sample is limited, I hope the results will provide preliminary evidence leading to a larger scale study.*
>
> *Attached are the items I wish to use from your work, A Vision of*

Excellence: Organizing Principles for Middle Grades Teacher Preparation. I have made some changes in language for clarity, and combined some descriptors in order to accommodate spacing issues. My intent is to maintain the integrity of your thoughts and beliefs while making the instrument user-friendly.

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Thank you,

Kristen Crabtree
3306 School Street
Des Moines, IA 50311
515-274-3040
kcrabtree@aea11.k12.ia.us

)ject: Re: Permission from doctoral student
:e: Friday, July 26, 2002 12:15:45 PM
ıder: Ken McEwin <mcewinck@appstate.edu>
Kristen Crabtree <kcrabtree@aea11.k12.ia.us>

isten,

:mission granted. Good luck with your work. I would like to learn about your results
en your project is completed.

ı McEwin

.sten Crabtree wrote:

)ear Sirs,

ıs a middle level advocate and practitioner, I am focusing my dissertation work on
idle level teachers. I am examining the relationship between self-attributed personal
ıaracteristics of middle level teachers and highly effective middle level practices. I
: your permission to use the descriptors for a "wise and experienced middle grades
ıcher" from A Vision of Excellence: Organizing Principles for Middle Grades Teacher
:paration as part of my study.

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tement is to the participant, how able each participant is to perform the behavior,
' the participant's level of satisfaction.

'his component of the survey will be compared to demographic data and two other
'tions: the unique nature of middle level teachers and personal characteristics of
'dle level teachers. I have two goals in this research: 1) to validate middle level
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ds of early adolescents; and 2) to address the notion that highly effective middle
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ıank you,

:isten Crabtree
306 School Street
es Moines, IA 50311
15-274-3040
:rabtree@aea11.k12.ia.us

Vision of Excellence items.doc

Name: Vision of Excellence items.doc
Type: WINWORD File (application/msword)
Encoding: BASE64
Download Status: Not downloaded with message

Subject: Re: Permission from doctoral student
Date: Friday, July 26, 2002 1:12:10 PM
Sender: peterscales <scalespc@search-institute.org>
To: Kristen Crabtree <kcrabtree@aea11.k12.ia.us>
CC: mcwinck@appstate.edu , t-dickinson@instate.edu , thomaserb@ukans.edu

ristен, you certainly have my permission to use the items. I just wondered what the 4 oint scale actually was for "able" to do the action and whether or not you need a ourth type of rating. Depending on the instructions you give, "able" might or might ot tap how often or how consistently they actually engage in these recommended ractices. I might feel various collaborative activities are important, be personally ole (willing, eager, have the knowledge, etc.) to do them, and be highly satisfied ith them when I do, but I might not do them nearly as often as I would like, for one eason or another. Right now, I don't think you can tap that kind of situation. erhaps, instead of making the whole thing 33% longer by adding a fourth rating to all ese, you would only ask for how often or how consistently you actually do the 5 ctions you consider the most important in being an excellent teacher. Just ideas. All ood luck on your research...

eter C. Scales, Ph.D.
enior Fellow
earch Institute

--Hello to all of my co-authors! Hope all goes well for you and yours...

really also think you might give them group headings that make it a little easier for espondents to get their heads around the domain in question. As it is, it's rather a ng list and you might start getting some response set bias toward the end if you just resent them without any categorization or other visual scheme.

risten Crabtree wrote:

Dear Sirs,

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Thank you,

Kristen Crabtree
3306 School Street
Des Moines, IA 50311
515-274-3040
kcrabtree@aea11.k12.ia.us

Vision of Excellence items.doc

Name: Vision of Excellence items.doc
Type: Microsoft Word Document (application/msword)
Encoding: base64

1-9-03

Dear Colleague:

As a middle level teacher, I have chosen to focus my dissertation on the personal characteristics of effective middle level teachers. This study has been sponsored by Drake University through the Doctor of Educational Leadership program and will be used as part of a program review of the middle school endorsement.

The vision of this study is to identify personal characteristics of teachers and to correlate those characteristics to effective middle level practices. In the literature, there has been strong emphasis on what effective middle level practices look like and the special people who work with young adolescents. However, the literature has yet to define those special personal characteristics and to connect them to practice. This study seeks to make a connection between effective middle level practices and the teachers who implement those practices.

Your name and address were selected from a random sample of all Iowa middle level teachers in grades 5 through 9 provided by the Iowa Department of Education. **I ask you to complete all 4 sides of the survey and send it back to me in the enclosed envelope by January 31, 2003. Please do not stain, fold or mark on the form outside of the designated spaces.** You will receive a reminder following this mailing. By returning the completed survey you will be giving your consent as a participant in the study. At any time, you may indicate a decision to withdraw from the study which will in now way include any negative consequences.

This study is confidential, that means, your name will be known only to me. You will be assigned an arbitrary ID tracking number so I can keep track of returned and unreturned surveys. Your school and your individual responses to survey items will not be identified in the study. Since these personal characteristics are not a scientific measure of personality, this study will make no claim to that effect and I will go to great lengths to use appropriate analyses of data, avoiding profiling or any inappropriate use of responses. Results of the study will be available on the Web through an URL address provided by Drake University. I will alert you to the address once the study is completed and the results are posted.

I thank you in advance for your participation in the study. I hope you will accept the bag of tea as appreciation for your time. If you have any questions, you may contact me or my advisor, Dr. Eunice Merideth at 1-800-44-DRAKE.

Sincerely,

Kristen Crabtree-Groff
3306 School Street
Des Moines, IA 50311
515-274-3040
kcrabtree@fbx.com

Middle Level Teacher Survey

MARKING INSTRUCTIONS

- Use a No. 2 pencil only.
- Do not use ink, ballpoint, or felt tip pens.
- Make solid marks that fill the response completely.
- Erase cleanly any marks you wish to change.
- Make no stray marks on this form.

CORRECT: ● INCORRECT: Ø⊗◐◒

· each of the following items rate how important each is to
ı, how able you are to perform the behavior, and your level of
isfaction that each item positively impacts your students. If an
n is not applicable to you please leave blank.

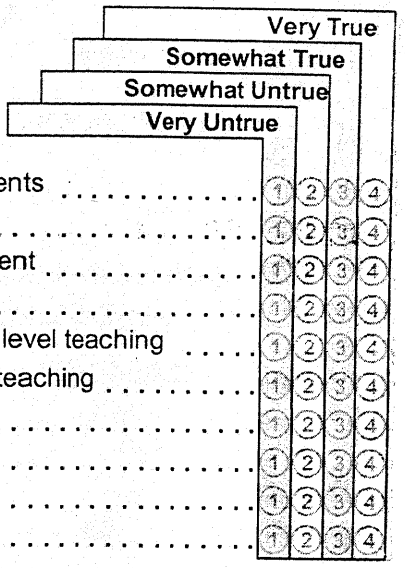
portance

Ability

Satisfaction

Very Unimportant	Somewhat Unimportant	Somewhat Important	Very Important	As a teacher, I:	Unable	Somewhat Able	Able	Very Able	Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied
1	2	3	4	Plan learning activities based on student developmental needs	1	2	3	4	1	2	3	4
1	2	3	4	Organize learning environment based on developmental needs	1	2	3	4	1	2	3	4
1	2	3	4	Know issues of student health, sexuality, and risk behaviors	1	2	3	4	1	2	3	4
1	2	3	4	Engage students in developing their abilities, aptitudes, and pursuits	1	2	3	4	1	2	3	4
1	2	3	4	Develop a balanced curriculum to meet student developmental needs	1	2	3	4	1	2	3	4
1	2	3	4	Develop a balanced curriculum that includes an essential common core	1	2	3	4	1	2	3	4
1	2	3	4	Develop a curriculum that explores significant social issues based on student interests	1	2	3	4	1	2	3	4
1	2	3	4	Develop an integrated curriculum that connects all subject areas	1	2	3	4	1	2	3	4
1	2	3	4	Am skilled at leading student inquiry in at least two subject areas	1	2	3	4	1	2	3	4
1	2	3	4	Am skilled at professional collaboration in developing curriculum	1	2	3	4	1	2	3	4
1	2	3	4	Balance teacher decision making with student decision making	1	2	3	4	1	2	3	4
1	2	3	4	Use hands-on and minds-on learning activities	1	2	3	4	1	2	3	4
1	2	3	4	Plan instruction and assessment around learning targets or goals	1	2	3	4	1	2	3	4
1	2	3	4	Use up-to-date technology for instruction and assessment	1	2	3	4	1	2	3	4
1	2	3	4	Possess a varied set of teaching strategies that appeal to students	1	2	3	4	1	2	3	4
1	2	3	4	Work with an interdisciplinary team of teachers	1	2	3	4	1	2	3	4
1	2	3	4	Possess interpersonal communication, group problem solving, and team building skills	1	2	3	4	1	2	3	4
1	2	3	4	Serve as a student advisor in our student advisory program	1	2	3	4	1	2	3	4
1	2	3	4	Participate on site-based committees	1	2	3	4	1	2	3	4
1	2	3	4	Create a personalized learning environment for students	1	2	3	4	1	2	3	4
1	2	3	4	Am knowledgeable about my community and its resources	1	2	3	4	1	2	3	4
1	2	3	4	Have built strong connections with community groups and agencies	1	2	3	4	1	2	3	4
1	2	3	4	Collaborate with community health providers, youth organizations, and social service agencies	1	2	3	4	1	2	3	4
1	2	3	4	Encourage parental participation in the education of students	1	2	3	4	1	2	3	4
1	2	3	4	Promote the physical, cognitive, and socio-emotional development of students	1	2	3	4	1	2	3	4
1	2	3	4	Have a deep, personal knowledge of the students I work with	1	2	3	4	1	2	3	4
1	2	3	4	Select, adapt, and create curricular experiences for diverse students	1	2	3	4	1	2	3	4
1	2	3	4	Assume a collective responsibility for educating all students	1	2	3	4	1	2	3	4
1	2	3	4	Create a community of learners	1	2	3	4	1	2	3	4

How true are the following statements for you?



efer to work with middle level students to working with elementary or high school students	1 2 3 4
btained my current position by choice rather than by default/reassignment	1 2 3 4
hose to pursue specialized training in middle level education as an undergraduate student	1 2 3 4
hose to pursue specialized training in middle level education as a graduate student	1 2 3 4
hile obtaining my undergraduate degree, I was encouraged by faculty to pursue middle level teaching	1 2 3 4
hile obtaining my graduate degree, I was encouraged by faculty to pursue middle level teaching	1 2 3 4
ten come to work excited about my job	1 2 3 4
an on staying at the middle level for the duration of my career	1 2 3 4
t everyone is suited to teach middle level students	1 2 3 4
n suited to teach middle level students	1 2 3 4

ease choose where you fit between each of the following pairs of words. What best describes you?

Concrete Thinker 1 2 3 4 5 6 7 Abstract Thinker	Focused 1 2 3 4 5 6 7 Distractible
Curious 1 2 3 4 5 6 7 Content	Industrious 1 2 3 4 5 6 7 Lazy
Risk-Taking 1 2 3 4 5 6 7 Conscientious	Autocratic 1 2 3 4 5 6 7 Democratic
Status Quo 1 2 3 4 5 6 7 Unconventional	Mischevious 1 2 3 4 5 6 7 Conforming
Tough-Minded 1 2 3 4 5 6 7 Tender-Minded	Forgiving 1 2 3 4 5 6 7 Punishing
Affectionate 1 2 3 4 5 6 7 Distant	Impulsive 1 2 3 4 5 6 7 Methodical
Self-Assured 1 2 3 4 5 6 7 Apprehensive	Cynical 1 2 3 4 5 6 7 Trusting
Conservative 1 2 3 4 5 6 7 Experimenting	Idealistic 1 2 3 4 5 6 7 Realistic
Excitable 1 2 3 4 5 6 7 Lethargic	Mature 1 2 3 4 5 6 7 Immature
Relaxed 1 2 3 4 5 6 7 Tense	
Optimistic 1 2 3 4 5 6 7 Pessimistic	
Dependent 1 2 3 4 5 6 7 Independent	
Humorous 1 2 3 4 5 6 7 Serious	
Flexible 1 2 3 4 5 6 7 Rigid	
Inhibited 1 2 3 4 5 6 7 Spontaneous	
Sociable 1 2 3 4 5 6 7 Aloof	

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0 0 0
1 1 1
2 2 2
3 3 3
4 4 4
5 5 5
6 6 6
7 7 7
8 8 8
9 9 9

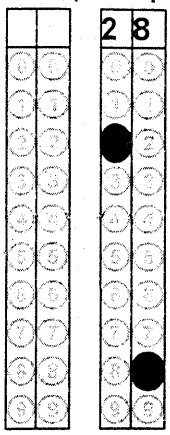
Middle Level Teacher Survey

Demographics

Which of the following best describes you?

What is your age (rounded up to nearest birthdate):

(Example:)



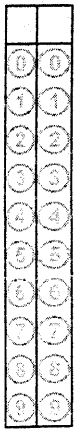
Gender:
- . . Female
- . . Male

Which of the following grades do you teach?
Fill in bubble for all that apply.

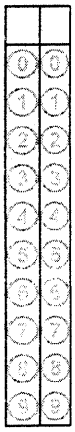
- . . 5th Grade
- . . 6th Grade
- . . 7th Grade
- . . 8th Grade
- . . 9th Grade

ow many years have you een teaching?

How many years have you been teaching at the middle level?



How many years have you been teaching in your current position?



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nich of the following best describes your school building?

Setting:
- . . Rural
- . . Suburban
- . . Urban

Which of the following grades are housed in the building in which you teach?
Fill in bubble for all that apply.

- . . 5th Grade
- . . 6th Grade
- . . 7th Grade
- . . 8th Grade
- . . 9th Grade

Vhere did you receive your teacher education training?

Vhere did you receive your middle level education training?

/hat comments do you have about this survey?

/hat was not asked that may help in this research project?